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**ABELIAN GROUPS.** See: groups.

**ABELIAN INTEGRALS.** See: algebraic functions; algebraic geometry; elliptic functions (Abelian integrals).

**ABSOLUTE DIFFERENTIAL CALCULUS.** See: differential geometry (Riemannian geometry); vector calculus (tensors)<sup>1</sup>

**ABSOLUTELY MONOTONE FUNCTIONS.** See: completely monotone functions.

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**AGGREGATES.** See: partially ordered sets; sets.

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Plattner, P. A.	8	Barbilian, D.	669	Herstein, I. N.	896
Zelinsky, D.	8	Jenner, W. E.	669	Fried, E.	992
Wolfson, K. G.	8	Epstein, M. P.	670	Masuda, K.	993
Iséki, K.	8	Cohn, R. M.	670	Kuniyoshi, H.	993
Nagata, M.	107	Chow, Wei-Liang	743	Erdős, P.-	
Zariski, O.	165	Chevalley, C.	788	Gillman, L.-	
Cohn, P. M.	214	Brown, W. P.	789	Henriksen, M.	993
Zariski, O.	398	Orsinger, H.	790	Herz, J.-C.	1084
Lang, S.-Weil, A.	398	Flanders, H.	791	Ono, T.	1087
Jaeger, A.	562	Krasner, M.	799	Rosenlicht, M.	1147
Okugawa, K.	562	Leopoldt, H. W.	799	Boseck, H.	1147

**Galois theory.** Cf. Algebra: equations (classical Galois theory); number theory (class fields).

Kawada, Y.	6	Masuda, K.	790	*Nakayama, T.-	
Beyer, G.	330	Wolf, P.	790	Azumaya, G.	895
Wolf, P.	330	Leopoldt, H. W.	799	Arf, C.	898
Nakayama, T.	560	Kawada, Y.-		Nobusawa, N.	1084
Safarevič, I. R.	571	Tate, J.	799		

**p-adic theory.** Cf. Number theory (algebraic number theory).

Skopin, A. I.	6	Kinohara, A.	679	Ono, T.	1087
Kawada, Y.	6				

**Valuations.**

Aubert, K. E.	8	Lazard, M.	561	Jaffard, P.	791
Zariski, O.	165	Benz, H.	561	Krasner, M.	799
Cohn, P. M.	214	Kinohara, A.	679	Moriya, M.	1087

**Commutative rings and ideal theory.** Cf. Functional analysis (normed rings); partially ordered sets (Boolean algebras).

Herstein, I. N.	5	Ukagawa, T.	441	Herstein, I. N.	789
Johnson, R. E.	5	Fuller, L. E.	441	*Nakayama, T.-	
Fuchs, L.	5	Seidenberg, A.	441	Azumaya, G.	895
Jenner, W. E.	7	Shimura, G.	441	Andrunakievič,	
Nagata, M.	107	Hion, Ya. V.	442	V. A.	896
Zinohara, Y.	107	Klingenberg, W.	507	Ehrlich, G.	896
Gröbner, W.	165	Moriya, M.	560	San Soucie, R. L.	896
Mori, Y.	212	Boughon, P.	560	Terada, F.	897
Deskins, W. E.	212	Mori, S.	560	Fuchs, L.	991
Levitzki, J.	212	Yoshida, M.-		Szendrei, J.	991
Lemmlin, V.	213	Sakuma, M.	560	Szépál, I.	991
Rosenberg, A.-		Lazard, M.	561	Kertész, A.	991
Zelinsky, D.	213	Benz, H.	561	Pollák, G.	991
Szele, T.	213	Okugawa, K.	562	Guérindon, J.	991
Yoshida, M.-		Matsumura, H.	563	Tominaga, H.	992
Sakuma, M.	213	Kähler, E.	563	Steinfeld, O.	992
Geddes, A.	213	Almeida Costa, A.	668	Kovács, I.	992
Muhly, H. T.	213	Levitzki, J.	668	Behrens, E.-A.	992
Woonyak, Y.	329	Podderyugin,		Robinson, A.	1080
Riera, E. L.-		V. D.	669	Séminaire A.	
Recillas, J. F.	329	Morrison, D. R.	669	Châtelet et	
Nagata, M.	329	Rees, D.	669	P. Dubreil,	
Tominaga, H.	329	Ree, Rimhak.	739	1953/1954.	1082
Kasch, F.	329	Mitsudo, F.	788	Kerstan, J.	1083
Fuchs, L.	421	Azumaya, G.	788	Bruck, R. H.	1083
Steinfeld, O.	441	Nagata, M.	788	McCoy, N. H.	1084
Andrunakievič,		Chevalley, C.	788	Szele, T.	1084
V. A.	441	Lamprecht, E.	789		

**Noncommutative rings.**

*Nakayama, T.-		Herstein, I. N.	896	Nobusawa, N.	1084
Azumaya, G.	895	Hebroni, P.	1084		

**Associative algebras.** Cf. Algebra: linear (special algebras).

Jenner, W. E.	7	Eilenberg, S.	442	Lamprecht, E.	789
Nagao, H.	7	Nagao, H.	442	Brown, W. P.	789
Tits, J.	11	Adamson, I. T.	442	Magnus, W.	790
Yoshii, T.	108	Munn, W. D.	561	Paige, L. J.	897
Heerema, N.	214	Büke, A.	561	Yoshii, T.-	
Ikeda, M.-		Hu, Sze-Tsen	561	Ikeda, M.	897
Nagao, H.-		Cohn, P. M.	562	Hu, Sze-tsen.	947
Nakayama, T.	214	Lal, G.	562	Hukuhara, M.	992
Kasch, F.	329	Rosenberg, A.	563	Thrall, R. M.	992
Osima, M.	330	Toyoda, G.-		Eilenberg, S.-	
Jacobson, N.	330	Hattori, A.	669	Ikeda, M.-	
Kokoris, L. A.	442	Jenner, W. E.	669	Nakayama, T.	993



ALGEBRA: ABSTRACT. (Continued)

Lie algebras. Cf. Groups (Lie groups).

Witt, E.	5	Hochschild, G.	443	Dieudonné, J.	789
Dieudonné, J.	12	Frank, M. S.	562	Magnus, W.	790
Freudenthal, H.	108	Hochschild, G.	562	*Nakayama, T.	895
Zassenhaus, H.	108	Venkatachaliengar, K. Srinivasa Rao, K.N.	562	Azumaya, G.	895
Iwahori, N.	108	Dobrescu, A.	567	Gluskov, V. M.	897
Hochschild, G.	109	Tits, J.	568	Borel, A.	897
Ambrose, W.	172	Hermann, R.	625	Mostow, G. D.	897
Singer, I. M.	214	Hellman, M. J.	670	Jacobson, N.	897
Herstein, I. N.	214	Chevalley, C.	672	*Chevalley, C.	901
Curtis, C. W.	230	Goldberg, S. I.	789	Schenkman, E.	993
Selgman, G. B.	330	Herstein, I. N.	789	Herz, J.-C.	1084
Shanks, M. E.	331			Mostow, G. D.	1087, 1088
Pursell, L. E.					

Nonassociative algebras.

Segre, B.	7	Kokoris, L. A.	442	*Nakayama, T.	
Weiner, L. M.	214	Patterson, E. M.	562	Azumaya, G.	895
Jacobson, N.	330	Roguculet, M. N.	789		

Topological problems. Cf. Functional analysis (linear topological spaces); groups (continuous); topology.

Aubert, K. E.	8	Eilenberg, S.	391	Rosenberg, A.	563
Zelinsky, D.	8	Mac Lane, S.	392	Postnikov, M. M.	735
Wolfson, K. G.	8	Eilenberg, S.	442	Erdős, P.	
Iséki, K.	8	Nagao, H.	442	Gillman, L.	
Cohn, P. M.	214	Adamson, I. T.	442	Henrikson, M.	993
Hämisch, W.	387	Andrunakievič, V. A.	443	Moriya, M.	994
Cartan, H.	390			Leptin, H.	1085

ALGEBRA: EQUATIONS. Cf. Polynomials.

*Burnside, W. S.		*Beaumont, R.A.		Stark, M.	663
Panton, A. W.	5	Ball, R. W.	210	Monographs on modern mathematics.	1143
*Mostowski, A.		Levi, H.	325		
Stark, M.	104	*Mostowski, A.			

Symmetric functions. Cf. Combinatorial analysis.

Stöhr, A.	328	Thiruvengadachar, V. R.	1082	David, F. N.	
Mahajani, G. S.				Kendall, M. G.	1153

Zeros, irreducibility. Cf. Algebra: linear (characteristic values); functions of complex variables (zeros); numerical methods (equations); polynomials (zeros); irreducibility).

Iséki, K.	328	Fried, E.	798	Weiner, L. M.	894
Krull, W.	559	Knobloch, H.-W.	798		

Classical Galois theory. Cf. Algebra: abstract (Galois theory).

Ninot, J.	439	Kustaanheimo, P.	1179		
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Systems of equations, elimination.

van der Waerden, B. L.	165	Osório, V.	211	Orsinger, H.	790
Seidenberg, A.	209	Csakalov, L.	667	Flanders, H.	791

ALGEBRA: LINEAR (CLASSICAL THEORY). Cf. Algebra; abstract; geometry (analytic; projective); groups; numerical methods (systems).

*Beaumont, R.A.		Toscano, E.	471	*Smirnov, W. I.	663
Ball, R. W.	210	*Mostowski, A.	663	Sawyer, W. W.	989
Levi, H.	325	Stark, M.			

Matrices, determinants; general theory. Cf. Series (convergence).

Huff, C. W.	4	Ostrowski, A. M.	210	Janet, M.	468
Cebotarev, G. N.	4	Mitchell, B. E.	210	Burchinal, J. L.	557
Kakar, A. G.	4	Wielandt, H.	211	Williamson, J.H.	557
Gluskin, L. M.	4	Dias Agudo, F.R.	211	Marcus, M. D.	557
Roy, S. N.	4	Murnaghan, F.D.	211	Wong, Y. K.	558
Brenner, J. L.	4	Householder, A.S.	211	Haynsworth, E.V.	558
Cherubino, S.	47	Tausky, O.	326	Ostrowski, A. M.	558
Carafa, M.	105	Fan, Ky.	326	Steinberg, A. S.	558
Horn, A.	105	Sherman, S.	326	Zuhovickii, S. I.	559
Gautschi, W.	105	Amante, S.	326	Fan, Ky-Todd, J.	664
Mihel'son, V. S.	105	Gautschi, W.	326	Littlewood, D. E.	665
Sinden, F. W.	105	Fan, Ky.		Woodbury, M. A.	665
Afriat, S. N.	105	Hoffman, A. J.	326	Bott, R.	
Brenner, J. L.	105	Veltkamp, G. W.		Mayberry, J.P.	665
Bellman, R.		Duparc, H.J.A.		Whitin, T. M.	665
Hoffman, A.	106	Peremans, W.	327	Maxfield, J. E.	
Richter, H.	106	Egervary, E.	327	Gardner, R. S.	665
Banachiewicz, T.	106	Klingenberg, W.	327	Stein, P.	665
Ważewski, T.	106	*Gantmacher, F.R.	438	Cherubino, S.	665
*Kowalewski, G.	210	Ribeiro, H.	439	Benedicty, M.	666
*Pupke, H.	210	Fuller, L. E.	441	Reiner, I.	666

ALGEBRA: LINEAR (CLASSICAL THEORY). (Continued)

Matrices, determinants; general theory. (Continued)

Jacob, H. G., Jr.	667	Szekeres, G.	785	Amato, V.	989
Parker, W. V.	784	Fantappiè, L.	785	Huff, G. B.	989
Goddard, L. S.	784	Del Pasqua, D.	785	Aczél, J.	989
Epstein, M.		Gyires, B.	893	Tartakovsky, V.A.	989
Flanders, H.	784	Perfect, H.	893	Dantzig, G. B.	
Wade, B. T.	784	Isbell, J. R.	893	Orden, A.	
Mauldon, J. G.	784	Moustafa, M. D.	893	Wolfe, P.	1054
Sherman, S.	784	Schneider, H.	894	Penrose, R.	1082
Fan, Ky.		Jones, J., Jr.	894	Ersöv, A. P.	1082
Hoffman, A. J.	784	Huszabazar, M.S.	894	Kotlyanskii, D. M.	1082
Wielandt, H.	785	Reichardt, H.	894	Rinehart, R. F.	1099
Magnus, W.	785	Wiegmann, N.A.	894		
de Bruijn, N. G.		Egervary, E.	894		

Special matrices, determinants.

Okamoto, M.	325	Olson, F. R.	988	Olson, F. R.	999
Rodeja F., E. G.	557	Carlitz, L.	989	Carlitz, L.	999
Koschmieder, L.	665	Carlitz, L.		Borsellino, A.	1081

Special algebras. Cf. Functions of complex variables (functions of quaternion variables).

Saban, G.	5	Nôno, T.	558	Vivier, M.	989
Murnaghan, F.D.	106	Longo, C.	627	Sieboldziński, W.	989
Fadini, A.	328	Schoenberg, B.	677	Spampinato, N.	989
Ibrahim, E. M.	328	Papy, G.	746	Linnik, Yu. V.	1002
Duncan, D. G.	328	Sce, M.	786	Sieboldziński, W.	1082
Spampinato, N.	397	Wiegmann, N.A.	894	Votruba, V.	
Fadini, A.	397	Weiner, L. M.	894	Christov, C. J.	1188
Morinaga, K.		Papy, G.	959		

Linear forms and equations. Cf. Functional analysis (equations); number theory.

Mihel'son, V. S.	105	Pagnl, M.	325	Mardesić, S.	439
Banachiewicz, T.	106	Egervary, E.	327	Andrade	
Ważewski, T.	106	Charles, B.	439	Guimarães, A.	669
Davis, C.	211				

Quadratic and bilinear forms. Cf. Functional analysis (equations); number theory.

Klingenberg, W.	327	Sostak, R. Ya.	666	Csakalov, L.	667
Oppenheim, A.	328	Dolph, C. L.		Tsuzuku, T.	669
Courant, R.		McLaughlin, J. E.-Marx, I.	666	Segre, B.	851
Hilbert, D.	426			Sieboldziński, W.	1082

Characteristic values, elementary divisors.

Sinden, F. W.	105	Fan, Ky.		Ostrowski, A. M.	558
Afriat, S. N.	105	Hoffman, A. J.	326	Sinden, F. W.	666
Beilman, R.		Fay, Ky.	327	Wielandt, H.	785
Hoffman, A.	106	Wu, T. T.	327	Rutishauser, H.	785
Urabe, M.	141, 142	Egervary, E.	327	Kotlyanskii, D.M.	894
Wielandt, H.	211	*Gantmacher, F.R.	438	Tartakovsky, V.A.	989
Dias Agudo, F. R.	211	Haynsworth, E.V.	558		

ALGEBRA OF LOGIC. See: logic (formal); partially ordered sets.

ALGEBRAIC FUNCTIONS. Cf. Algebra: abstract (fields); algebraic geometry; elliptic functions; functions of complex variables (Riemann surfaces).

Lang, S.	7	Zariski, O.	165	Jenner, W. E.	669
Plattner, P. A.	8	Segre, B.	281	Ono, T.	1087
Severi, F.	163	Marchionna, E.	509	Rosenlicht, M.	1147
Conforto, F.	164	Benedicty, M.	666	Boseck, H.	1147

ALGEBRAIC GEOMETRY. Cf. Algebraic functions; geometry (configurations; projective).

Severi, F.	163				
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Special curves and surfaces. Cf. Calculus (applications); geometry (elementary).

Primrose, E. J. F.	613	Granát, L.		Godeaux, L.	613
		Fiedler, M.	613		

Curves: general theory.

Vaccaro, M.	65	Wiman, A.	450	Fava, F.	740
Thalberg, O. M.	65	Bonera, P.	508	Brusotti, L.	740
Brusotti, L.	163	Marchionna, E.	508	Gudkov, D. A.	741
Roth, L.	164	Marchionna, E.	509	Rosina, B. A.	850
Mammana, C.	279	Tibiletti, C.	509	Gherardelli, F.	851
Marchionna, E.	279	Nollet, L.	511	Casteels, L.	951
Masotti		Ghezzi, S.	614	Godeaux, L.	951
Biggiero, G.	280	Galafassi, V. E.	614	Segre, B.	951
Segre, B.	281	*Primrose, E. J. F.	740	Franchetta, A.	1047
Primrose, E. J. F.	396	Selmer, E. S.	740	Martinelli, E.	1047
Spampinato, N.	397	Thalberg, O. M.	740		

## ALGEBRAIC GEOMETRY. (Continued)

## Surfaces, varieties: general theory.

- |                   |          |                  |          |                  |      |
|-------------------|----------|------------------|----------|------------------|------|
| Spampinato, N.    | 65       | Spampinato, N.   | 510      | Chatelet, F.     | 850  |
| Vesentini, E.     | 66       | Godeaux, L.      | 511      | Terracini, A.    | 850  |
| Boughon, P.       | 66       | Roth, L.         | 511      | Segre, B.        | 851  |
| Roth, L.          | 66       | Yûjôbô, Z.       | 511      | Genovese, C.     | 851  |
| Kodaira, K.       |          | Noilet, L.       | 511      | Gherardelli, F.  | 851  |
| Spencer, D. C.    | 75       | Segre, B.        | 511      | Bureau, W.       | 852  |
| Nagata, M.        | 107      | Franchetta, A.   | 614      | Galburà, G.      | 852  |
| Severi, F.        | 163      | Spampinato, N.   | 614      | Boughon, P.      | 852  |
| Matsusaka, T.     | 163      | Sempie, J. G.    | 614      | Kodaira, K.      | 857  |
| Barsotti, I.      | 163      | Burniat, P.      | 614, 615 | Spencer, D. C.   | 857  |
| Conforto, F.      | 164      | Filippi, L.      | 615      | Segre, B.        | 951  |
| Benedicty, M.     | 164      | Guazzone, S.     | 615      | Hodge, W.        |      |
| Scott, D. B.      | 164      | Morin, U.        | 615      | Atiyah, M.       | 951  |
| Burniat, P.       | 164      | Masotti          |          | Kodaira, K.      | 952  |
| Hodge, W. V. D.   | 165      | Biggiogero, G.   | 616      | Baily, W. L.     | 953  |
| van der Waerden,  |          | Du Val, P.       | 616      | Pyateckii-       |      |
| B. L.             | 165      | Barsotti, I.     | 616      | Sapiro, I. I.    | 953  |
| Gröbner, W.       | 165      | Shimura, G.      | 616      | Serre, J.-P.     | 953  |
| Zariski, O.       | 165      | Guggenheimer, H. | 617      | Lorent, H.       | 1047 |
| Predonzan, A.     | 280      | Kodaira, K.      | 617      | Godeaux, L.      | 1047 |
| Manara, C. F.     | 280      | Kodaira, K.      |          | Morelock, J. C.  |      |
| Hall, R.          | 281      | Spencer, D. C.   | 617      | Perry, N. C.     | 1047 |
| Spampinato, N.    | 396, 397 | Spencer, D. C.   | 618      | Northcott, D. G. | 1048 |
| Carbonaro, C. M.  | 397      | Kodaira, K.      | 618      | Blanchard, A.    | 1048 |
| Balsimelli, P.    | 397      | Akizuki, Y.      |          | Gauthier, L.     | 1048 |
| Fadini, A.        | 397      | Nakano, S.       | 619      | Chevalley, C.    | 1048 |
| Severi, F.        | 397      | Scafiati, M.     | 741      | Meynieux, R.     | 1143 |
| Conforto, F.      | 397      | Marchionna, E.   | 742      | Zappa, G.        | 1146 |
| Nishimura, H.     | 397      | Rosati, M.       | 742      | Burniat, P.      | 1146 |
| Nakai, Y.         | 397      | Gallarati, D.    | 743      | Conforto, F.     | 1146 |
| Nagata, M.        | 398      | Ninević, L. B.   | 743      | Bureau, W.       | 1146 |
| Nakai, Y.         | 398      | Chow, Wei-Liang. | 743      | Stein, E.        | 1147 |
| Zariski, O.       | 398      | Matsusaka, T.    | 743      | Longo, C.        | 1147 |
| Lang, S.-Weil, A. | 398      | Morikawa, H.     | 743      | Rosenlicht, M.   | 1147 |
| Weil, A.          | 398      | Roth, L.         | 743      | Boseck, H.       | 1147 |
| Fava, F.          | 510      | Godeaux, L.      | 850      |                  |      |
|                   |          | Gallarati, D.    | 850      |                  |      |

## Cremona transformations.

- |                  |     |                |     |                  |      |
|------------------|-----|----------------|-----|------------------|------|
| Turri, T.        | 65  | Spampinato, N. | 397 | Gröbner, W.      | 741  |
| Dedò, M.         | 65  | Vaona, G.      | 510 | Marchionna, E.   | 742  |
| Guggenheimer, H. | 172 | Goddard, L. S. | 510 | Rosati, M.       | 742  |
| Manara, C. F.    | 280 | Balsimelli, P. | 510 | Segre, B.        | 951  |
| Hall, R.         | 281 | Fadini, A.     | 510 | Balsimelli, P.   | 1047 |
| Fabricius-       |     | Turri, T.      | 741 | Northcott, D. G. | 1048 |
| Bjerre, F.       | 396 | Gutwirth, A.   | 741 |                  |      |

ALGEBRAIC INVARIANTS. See: invariants (algebraic).

ALGEBRAIC NUMBERS. See: number theory.

## ALMOST PERIODIC FUNCTIONS. Cf. Dirichlet series; Fourier series.

- |                 |          |                     |     |                 |      |
|-----------------|----------|---------------------|-----|-----------------|------|
| Doss, R.        | 242, 243 | Tornehave, H.       | 735 | Nikaidô, H.     | 1030 |
| Kaluza, T., Jr. | 354      | *Besicovitch, A. S. | 817 | Iséki, K.       | 1030 |
| Følner, E.      | 490      | Eberlein, W. F.     | 817 | Arens, R. F.    |      |
| Tornehave, H.   | 610      | Tornehave, H.       | 920 | Calderón, A. P. | 1102 |

ANALYTIC FUNCTIONS. See: functions of complex variables.

ANALYTIC GEOMETRY. See: geometry (analytic).

ANALYTIC THEORY NUMBERS. See: number theory.

ANTENNAS. See: electricity (antennas).

## APPROXIMATION AND EXPANSION OF FUNCTIONS. Cf. Differential equations (boundary value problems); Fourier integrals; Fourier series; functions of complex variables (polynomial expansions; complex interpolation); integral transforms; interpolation; numerical methods; polynomials (polynomial approximations); series; special functions (functions defined by special expansions).

## General theory.

- |                  |     |          |      |                  |      |
|------------------|-----|----------|------|------------------|------|
| Meril, L.        | 354 | Maak, W. | 1008 | *Natanson, I. P. | 1100 |
| *Gončarov, V. L. | 803 |          |      |                  |      |

## Orthogonal functions and expansions. Cf. Polynomials (special polynomials).

- |                   |     |                 |     |                    |      |
|-------------------|-----|-----------------|-----|--------------------|------|
| Littlewood, J. E. | 126 | Hilbert, D.     | 426 | Timan, A. F.       | 920  |
| Andreoli, G.      | 126 | Meschkowski, H. | 461 | Chrestenson, H. E. | 920  |
| Abramov, L. M.    | 354 | Kuzmak, G. E.   | 468 | Fine, N. J.        | 920  |
| Civin, P.         | 354 | Walsh, J. L.    |     | Stečkin, S. B.     | 1101 |
| Courant, R.       |     | Davis, P.       | 580 |                    |      |

## APPROXIMATION AND EXPANSION OF FUNCTIONS. (Continued)

## Completeness theorems.

- |              |     |                  |     |
|--------------|-----|------------------|-----|
| Porcelli, P. | 118 | Mergelyan, S. N. |     |
| Saldukov, K. | 241 | Tamadyan, A. P.  | 687 |

## Best approximation.

- |               |     |                |      |
|---------------|-----|----------------|------|
| Gončar, A. A. | 803 | Turekii, A. H. | 1101 |
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AREA. See: measure and integration (area).

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**COMPLEX SPACE.** See: geometry (geometry in the complex domain).

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**CONFORMAL DIFFERENTIAL GEOMETRY.** See: differential geometry (conformal).

**CONFORMAL MAPPING.** See: differential geometry; functions of complex variables.

**CONIC SECTIONS.** See: geometry (elementary; projective).

**CONJUGATE FUNCTIONS.** See: Fourier series (conjugate functions); integral transforms (Hilbert transforms).

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**CREMONA TRANSFORMATIONS.** See: algebraic geometry (Cremona transformations).

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**CURVES.** See: algebraic geometry; calculus (applications); differential geometry; functions of real variables (differentiation); geometry; topology.

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**DEFINITE INTEGRALS.** See: calculus (evaluation of integrals).

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**DENJOY INTEGRALS.** See: measure and integration (Denjoy theory).

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Hellman, M. J.	670	Hartman, P.		Nehari, Z.	1093
Olver, F. W. J.	695	Wintner, A.	1023	Lyščenko, N. Ya.	1110
Antosiewicz, H. A.		Latševa, K. Ya.	1023	Simonart, F.	1112

Nonlinear oscillations. Cf. Elasticity (wave propagation); hydrodynamics (wave propagation); mechanics (oscillations).

Mizohata, S.	38	Colombo, G.	477	Graffi, D.	925
Simanov, S. N.	131	Minorsky, N.	477	Manaresi, G.	925
Minorsky, N.	131	Aymerich, G.	478	Wasow, W. R.	925
Gillies, A. W.	131	Sansone, G.		Minorsky, N.	926
Graffi, D.	131	Conti, R.	478	Gillies, A. W.	926
Klotter, K.		Stoker, J. J.	590	Scott, E. J.	
Pinney, E.	133	Graffi, D.	590	Carver, D. R.	926
Malkin, I. G.	249	Malkin, I. G.	590	Bulgakov, B. V.	1024
Steinberg, T. S.	249	Klotter, K.	591	Caughey, T. K.	1025
Hohlov, R. V.	249, 250	Minorsky, N.	591	Bulgakov, N. G.	1025
Manaresi, G.	250	Szablewski, W.	591	Sibuya, Y.	1026
de Castro, A.	250	Krasovskii, N. N.	701	de Castro, A.	1026
Minozzi, L.	250	Ku, Y. H.	701	Mitropol'skii, Yu. A.	1026
Reissig, R.	250	Taam, Choy-Tak	701	Huang, T. C.	1026
*Hayashi, C.	250	Suyama, Y.	701	Morris, G. R.	1026
Ryskov, S. S.	362	Atkinson, F. V.	701	Manacorda, T.	1026
Ryskov, S. S.	362	Mitropol'skii, Yu. A.	822	Volpato, M.	1111
Kac, A. M.	363	Kac, A. M.	822	Capra, V.	1111
Minorsky, N.	363	Drozdzov, Yu. M.	822	Sakurai, A.	1111
Slezinger, I. N.	363	Zlámál, M.	823	Mitropol'skii, Yu. A.	1111
De Castro, A.	363	Caprioli, L.	823	Barbát, I.	1112
Kauderer, H.	363	Furuya, S.	823	Minorsky, N.	1112
Yoshizawa, T.	475	Minor, S.	823	Cohen, H.	1112
Zachrisson, L. E.	477	Belyustina, L. N.	823	Reissig, R.	1112
Furuya, S.	477	Vallese, L. M.	823		
Yamaguti, M.	477	Poli, L.	823		
Malgarini, G.	477	Massera, J. L.	925		
Antosiewicz, H. A.	477				

Ordinary equations: special types. Cf. Ballistics; calculus (applications); special functions.

Wittich, H.	36	Vasil'eva, A. B.	362	Cunningham, W. J.	1026
Mazoni, P.	38	Belyustina, L. N.	362	Servranckx, R.	1027
Haskey, H. W.	54	Müller, R.	362	Storlazzi, R.	1027
Ločyanskii, L. G.	132	Zachrisson, L. E.	477	Mitšinovič, D. S.	1113
Bautin, N. N.	133	Furuya, S.	477	Billouet, G.	1113
Kubo, O.	250	Aymerich, G.	478	Czajkowski, J.-Tietz, T.	1113
Gyires, B.	251	Smirnov, M. M.	700		

Total equations, Pfaff problem.

Rachajsky, B.	252	Piaggio, H. T. H.	704	Kasuga, T.	927
Rachajsky, B.	479	Holman, D. F.	704	Germany, R. H.	1027
Liebermann, P.	520	Papy, G.	746	Šlebožinski, W.	1082

Partial equations: first order, systems, etc.

Carrier, G. F.	37	Bouligand, G.	252	Aržanyh, I. S.	479
Courant, R.	39	Oleinik, O. A.	253	Cinquini-Cibrario, M.	479
Birkhoff, G.	39	Borok, V. M.	253	Hartman, P.	
Szarski, J.	39	Kostyuchenko, A. G.	253	Wintner, A.	703
Pailloux, H.	39	G. Šilov, G. E.	253	Plis, A.	704
Bouligand, G.	39	Kostyuchenko, A. G.	253	Siegel, C. L.	704
Geiringer, H.	40	A. G.	253	Tihonov, A. N.	
Lukomskaya, M. A.	40	Zitomirskii, Ya. I.	253	Samaraskii, A. A.	704
Pucci, C.	40	Beckert, H.	254	Hornich, H.	825
*Petrovskii, I. G.	133	Meiman, N. N.	254	Pucci, C.	1028
Bouligand, G.	133	Plis, A.	258	Cinquini, S.	1113
Herbst, R. T.	251	Moisil, Gr. C.	364		

Partial equations: second order: general theory.

Leray, J.	39	Tihonov, A. N.	364	Bergman, S.	
Pucci, C.	40	Samaraskii, A. A.	364	Schiffer, M. M.	705
Mihlin, S. G.	40, 41	Müller, K. S.	364	Bureau, F. J.	826
*Petrovskii, I. G.	133	Moisil, Gr. C.	364	Hellwig, G.	828
Sauer, R.	133	*Petrovskii, I. G.	478	*Sobolev, S. L.	1027
Beckert, H.	254	*Tricomi, F. G.	703	Moisil, Gr. C.	1028
Meiman, N. N.	254	*Heilbronn, G.	703	Pucci, C.	1028
McConnell, A. J.	256	Ciorănescu, N.	704	Schlegelmilch, W.	1113

Partial equations: second order: elliptic. Cf. Elasticity; electricity; harmonic functions; hydrodynamics; potential theory.

Serrin, J. B.	42	Linhart, J. G.	42	Müller, C.	42
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## DIFFERENTIAL EQUATIONS. (Continued)

## Partial equations: second order: elliptic (Continued)

Bononcini, V. E.	42	Nirenberg, L.	367	*Tricomi, F. G.	703
Birman, M. S.	42	Brousse, P.	705	Bergman, S.	705
Sapiro, Z. Ya.	42	Poncin, H.	368	Boulanger, J.	705
Titchmarsh, E. C.	43	Hyman, M. A.	368	Maurin, K.	705
Bicadze, A. V.	43	Weinstock, R.	368	Browder, F. E.	705
Protter, M. H.	43	Fer, F.	368	John, F.	706
Weinberger, H. F.	43	Arfanyh, I. S.	368	Schaefer, H.	706
Cimmino, G.	133	Nehari, Z.	368	Karabegov, V.-K. I.	706
Gergen, J. J.	134	Kikuta, T.	369	Simoda, S.	706
Dressel, F. G.	134	Karmanov, V. G.	369	Ehring, G.	706, 707
Martin, M. H.	134	Vasilache, S.	372	Bers, L.	707
Browder, F. E.	134	Mysovskii, I. P.	406	Finn, R.	708
Grinberg, S. I.	135	Burgerhout, Th. J.	406	Položil, G. N.	708
Hunt, G. A.	135	Schröder, J.	406	Moisil, Gr. C.	709
Peters, A. S.	135	Garabedian, P. R.	428	Diaz, J. B.	710
Stoker, J. J.	135	Višik, M. I.	480	Martin, A. I.	826
Calderón, A. P.	136	Mann, W. R.	480	Titchmarsh, E. C.	827
Gould, R. N.	136	Blackburn, J. F.	480	Glazman, I. M.	827
Cunliffe, A.	136	Horváth, J. I.	480	Lopatinskii, Ya. B.	827
Frankl', F. I.	191	Mihlin, S. G.	480	Morrey, C. B., Jr.	827
Tamada, K.	193	Netanyahu, E.	481	Višik, M. I.	927
Hartman, P.	256	de Schwarz, M. J.	481	Vekua, I. N.	928
Wintner, A.	256	Diaz, J. B.	481	Lopatinskii, Ya. B.	928
McConnell, A. J.	256	Weinstein, A.	481	Volpert, A. I.	929
Lopatinskii, Ya. B.	256	Vasilache, S.	481	Walter, W.	929
Harazov, D. F.	256	Friedlander, F. G.	482	Hersch, J.	929
Syngé, J. L.	257	Keller, J. B.	482	Nitsche, J.	955
Višik, M. I.	257	Pólya, G.	482	Lions, J.-L.	1028
Douglas, A.	257	Saul'ev, V. K.	482	Bers, L.	1114
Usmanov, N. K.	258	Levitan, B. M.	482	Vekua, I. N.	1114, 1115
Birman, M. S.	258	Bojanić, R.	482	Heinz, E.	1115
Huber, A.	258	Morawetz, C. S.	484	Nagumo, M.	1116
Bers, L.	260	Germain, P.	485	Hong, I.	1116
Pini, B.	365	Edel'man, S. D.	485	Dnestrovskii, Yu. N.	1116
Magenes, E.	365	Mossakovskii, V. I.	539	Ladyženskaya, O. A.	1120
Nitsche, J.	365	Pólya, G.	591	Finn, R.	1120
Gårding, L.	366	Schiffner, M.	591	Ezra, J.	1124
Slobodeckii, L. N.	366	Nocilla, S.	591		
Oleinik, O. A.	366	Nirenberg, L.	592		
Mihlin, S. G.	366, 367	Finn, R.	592		
Morrey, C. B., Jr.	367	Ezra, J.	592		

## Partial equations: second order: parabolic. Cf. Diffusion; elasticity; heat conduction; hydrodynamics.

Hille, E.	45	Lochs, G.	370	Lax, P. D.	
Dobryśman, E. M.	45	Itô, S.	370	Milgram, A. N.	709
Browder, F. E.	134	Yosida, K.	370	Lyance, V. E.	709
Ciliberto, C.	139	Edel'man, S. D.	485	Rosenbloom, P. C.	709
Pucci, C.	140	Pini, B.	485	Karimov, D. H.	709
Kamynin, L. I.	259	Melman, N. N.	485	Niculescu, M.	709
Oleinik, O. A.	259	Lax, P. D.	524	Călugăreanu, G.-Rado, F.	710
Ventcel', T. D.	259	Hodžaev, L. Š.	593	Lions, J. L.	927
Prodi, G.	259	Ray, D.	593	Hadarnad, J.	930
Pistoia, A.	260	Pini, B.	593	Ciliberto, C.	1028
Krzyżański, M.	370	Zenit, T.	593	Olevskii, M. N.	1117
O'Sullivan, D. G.	370	Baratta, M. A.	594	De Giorgi, E.	1119
Finkel'stein, B. N.	370	*Tricomi, F. G.	703	Fichera, G.	1124
Halatnikov, I. M.	370				

## Partial equations: second order: hyperbolic. Cf. Elasticity (wave propagation); electricity (waves); geophysics; hydrodynamics (wave propagation); hydrodynamics, aerodynamics (perfect fluids: compressible); potential theory.

Bicadze, A. V.	43	Diaz, J. B.	710	Diaz, J. B.	710
Protter, M. H.	43	Ludford, G. S. S.	369	Leray, J.	711
Weinberger, H. F.	43	Arf, C.	369	Fer, F.	711
Foures-Bruhat, Y.	43	Durand, E.	369	Protter, M. H.	711
*Foures, Y.	44	Pastori, M.	370	Gurevič, M. I.	712
Douglas, A.	44	Dahlquist, G.	407	Jessel, M.	712
Friedrichs, K. O.	44	Hosemann, R.	407	Silvnyak, I. M.	712
John, F.	44	Bagchi, S. N.	483	Lax, P. D.	828
Blum, E. K.	136, 137	Hörmander, L.	483	Fogel, K.-G.	828
Weinstein, A.	137	Protter, M. H.	483	Borok, V. M.	929
Gårding, L.	138	Ludford, G. S. S.	483	Méthé, P.-D.	1101
Manaresi, F.	138	Vasilache, S.	484	Campbell, L. L.	
*Leray, J.	139	Fleishman, B. A.	484	Robinson, A.	1116
Nardini, R.	202	Douglas, A.	484	Jones, D. S.	1117
Hölder, B.	254	Eliana, I. P.	484	Eliana, I. P.	1117
Behrbohm, H.	255	Morawetz, C. S.	484	*Vahdati, A. N.	1117
Eliana, I. P.	255	Germain, P.	485	Olevskii, M. N.	1117
Méthé, P.-D.	255	Douglas, A.	593	Ladyženskaya, O. A.	1117
Protter, M. H.	255	Petrovskii, I. G.	593	Diaz, J. B.	
Haack, W.	255	Cudov, L. A.	593	Landschoff, R.	1117
Hellwig, G.	255	Lovass-Nagy, V.	593		
Karmanov, V. G.	369	*Tricomi, F. G.	703		

## DIFFERENTIAL EQUATIONS. (Continued)

## Partial equations of higher order. Cf. Elasticity; hydrodynamics.

Pucci, C.	40	Bojanić, R.		Capriz, G.	1029
Melman, N. N.	254	Vučković, V.	482	Biondel, J.-M.	1029
Mendes, M.	371	Nardini, R.	712	Nardini, R.	1118
Hornich, H.	480	Hoff, N. J.	931	De Giorgi, E.	1119
		Pucci, C.	1028	Levi, B.	1119

## Partial equations: special types. Cf. Special functions.

Mambriani, A.	46	Babić, V. M.	538	Marziani, M.	766
Pini, B.	46	Shibata, T.	594	Sobolev, S. L.	1029
Davis, R. B.	260	Dorfman, A. G.	594	Nardini, R.	1118

## Infinitesimal transformations. Cf. Contact transformations.

Urabe, M.	141, 142	Glenn, O. E.	825	Lepage, Th.	1028
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## Applications of integral transforms: ordinary and partial. Cf. Operational calculus.

Račevski, P. C.	260	Bagchi, S. N.	483	Capriz, G.	1029
Hosemann, R.		Bergman, S.	705	Aseltine, J. A.	1113

## Boundary value and expansion problems, characteristic values: ordinary and partial. Cf. Harmonic functions (Dirichlet problem).

Titchmarsh, E. C.	30	Fage, M. K.	362	*Naimark, M. A.	702
Nitsche, J.	38	Stampacchia, G.	363	Weinberger, H. F.	824
Zlamal, M.	38	Laasonen, P.	363	Snoł', E.	824
Snoł', I. E.	38	Bauer, W. F.	364	Titchmarsh, E. C.	824
Zimmerberg, H. J.	38	Courant, R.	426	Biglov, Z. I.	824
Krein, M.	38	Hilbert, D.	426	Zadira, K. V.	824
Coddington, E. A.	39	Gregus, M.	478	Martin, A. I.	826
Mihlin, S. G.	40, 41	Hartman, P.	478	Titchmarsh, E. C.	827
Titchmarsh, E. C.	43	Grohne, D.	478	Martin, A. I.	827
Brü, N. I.	251	Pólya, G.	482	Glazman, I. M.	827
Schröder, J.	251	Levitan, B. M.	482	Elliott, J.	927
Harazov, D. F.	256	Bojanić, R.	482	Feller, W.	927
Syngé, J. L.	257	Vučković, V.	482	Epheser, H.	1027
Višik, M. I.	257	Bojanić, R.	482	Whyburn, W. M.	1027
Usmanov, N. K.	258	Faedo, S.	524	Levitan, B. M.	1027
Birman, M. S.	258	Pólya, G.	591	Mishoe, L. I.	1027
Oleinik, O. A.	259	Schiffner, M.	591	Putnam, C. R.	1113
Ventcel', T. D.	259	Chandrasekhar, S.	632	Kay, I.	1113
Račevski, P. C.	260	Heywood, P. C.	702	Fujita, H.	1154

## Differential operators and differential equations of infinite order. Cf. Functional analysis (operators).

Coddington, E. A.	39	Maass, H.	449	Feller, W.	824
Coddington, E. A.	133	Grothendieck, A.	480	Elliott, J.	927
Leader, S.	145	Grothendieck, A.	489	Feller, W.	927
Kamynin, L. I.	251	Lippmann, H.	490	Lions, J. L.	927
Aronszajn, N.	252	*Naimark, M. A.	702	Festenko, S. E.	1111
Milgram, A. N.	252	Biglov, Z. I.	824		

## DIFFERENTIAL FORMS. See: differential equations (formal theory); differential geometry; invariants (differential).

## DIFFERENTIAL GEOMETRY.

Finikov, S. P.	433	*Vranceanu, G.	1049
*Biernacki, M.	511	Efimov, N. V.	1149

## Set-theoretical methods (natural and finite differential geometry). Cf. Functions of real variables (differentiation); geometry (abstract metrics).

Mirguet, J.	66	Haupt, O.	165	Scherk, P.	853
Plis, A.	165	Haupt, O.	281	Denjoy, A.	1091

## Classical differential geometry in general. Cf. Contact transformations.

Gentile, M. L.	67	Bottema, O.	282	*Julia, G.	744
Corio, A.	67	Sansone, G.	283	Sauer, R.	744
Vaccaro, G.	67	Dekker, D.	399	Gándara, A. N.	744
Sbrana, F.	67	Serini, R.	399	Woinarowski, R.	744
Golab, S.	67	Jha, P.	399	Palman, D.	744
Strubecker, K.	67	Backes, F.	399	Havlicek, K.	745
Hartman, P.	68	Gheorghiu, G. T.	400	Marussi, A.	745
Wintner, A.	68	Vincensini, P.	400	Gambotto, A.	746
Finikov, S. P.	68	Blanuša, D.	401	Bompiani, E.	746
Ryžkov, V. V.	69	Viguier, G.	513	Özkan, A.	746
Bazylev, V. T.	70	Kovancov, N. I.	514	Pan, T. K.	746
Diamantopoulos, T.	166	Oprea, A.	515	Arf, C.	853
Florin, M.	166	Demaria, D. C.	620	Kadefavek, F.	853
Šemin, F.	166	Ascoli, G.	620	Vidav, I.	854
Lagrange, R.	166	Muracchini, L.	620	Backes, F.	854
Strubecker, K.	167	Niculescu, A.	620	Gheorghiev, G.	856
Pini, M.	167	Hammer, P. C.	621	*Strubecker, K.	954
Hopf, H.	167	Grigor'ev, I. N.	621	Vincze, S.	1049
Rešetnyak, Yu. G.	167	Haimovici, A.	621	Scherrer, W.	1050
Arf, C.	282	Mayer, O.	622	Mayer, O.	1050
Longo, C.	282	Backes, F.	622	Löbell, F.	1148

DIFFERENTIAL GEOMETRY. (Continued)

Kinematical methods. Cf. Mechanics (kinematics).

Wunderlich, W.	283	Biran, L.	619	Noli, W.	853
*Julia, G.	512, 619	Blaschke, W.	853	Horninger, H.	853
Horninger, H.	619	Forte, B.	853	Brauner, H.	1050

Special mapping problems. Cf. Geodesy (elementary).

Kreyszig, E.	399
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Special curves and surfaces. Cf. Calculus (applications).

Mineo, C.	66	Bernhart, A.	513	Fabricius-	
Bagchi, H.	166	Tenca, L.	513	Bjerre, Fr.	619
Pinl, M.	399	Deaux, R.	619	Niçe, V.	954
Kerawala, S.	399	Bilinski, S.	619	Parodi, M.	1147
				Wunderlich, W.	1148

Minimal surfaces. Cf. Calculus of variations (minimal surfaces).

Strubecker, K.	67	Wunderlich, W.	621	Backes, F.	1050
Dumitrescu, M.G.	513	Pinl, M.	744	Heinz, E.	1115
Mihăilescu, T.	514	Belgodère, P.	849		

Families and nets of curves, webs.

Naumann, H.	167	Dou, A.	400	Legrain-	
Bell, P. O.	168	Blaschke, W.	401	Pissard, N.	856
Radon, J.	282	Haimovici, A.	401	Dou, A.	856
Sansone, G.	283	Müller, A.	620, 621	Vincensini, P.	955
Wunderlich, W.	283	Sulikovskii, V. I.	746	Vincensini, P.	1050
				Cahtauri, A. I.	1148

Differential line geometry. Cf. Geometry (lines).

Finikov, S. P.	68	Rozet, O.		Saban, G.	855
Laktanova, N. V.	68	Legrain-		Godeaux, L.	855, 856
Rybakov, V. N.	68	Pissard, N.	513	Shri Krishna	856
Backes, F.	69	Godeaux, L.	513	Gheorghiev, G.	856
Kovancov, N. I.	69	Manara, C. F.	514	Vincensini, P.	955
Grincivicius, K. I.	69	Mihăilescu, T.	514	Brejcha, J.	955
Tuganov, N. G.	69	Marcus, F.	622	Backes, F.	1050
Jha, P.		Vincensini, P.	622	Kovancov, N. I.	1050
Charari, V. R.	167	Byušgens, S. S.	745	Tuganov, N. G.	1050
Finikoff, G.	167	Frey, A.		Godeaux, L.	1149
Geldel'man, R.M.	168	Strubecker, K.	745	Mishra, R. S.	1149
Muracchini, L.	513	Geldel'man, R.M.	745	Geldel'man, R.M.	1149
Jonas, H.	513	Glagoleva, N. N.	745	Mayer, O.	1150
		Jonas, H.	855		

Laguerre and other sphere geometries. Cf. Geometry (lines).

Klingenberg, W.	168	Geldel'man, R.M.	745
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Geometry of lineal and higher space elements.

Varga, O.	170	Sasayama, H.	860
Terracini, A.	854	Tonooka, K.	860

Topological problems. Cf. Topology (applications).

Bompiani, E.	70	Kuiper, N. H.	282	Kodaira, K.	
Hodge, W. V. D.	165	Aoki, K.	284	Spencer, D. C.	857
Guggenheimer, H.	172	Norguet, F.	857		

Differential geometry in the large, integral geometry. Cf.

Convex bodies; isoperimetric problems.

Pogorelov, A. V.	162	Remba, E.	396	Dulmage, L.	740
Alexandrov, A.D.	162	Hiawka, E.	508	Hsiung, Chuan-	
Federer, H.	163	Corrin, S.	508	Chih.	849
Hopf, H.	168	Blanusa, D.	515	Chern, Shiing-	
Strel'cov, V. V.	278	Nash, J.	515	Shen.	856
Bakel'man, I. Ya.	283	Hadwiger, H.	613	Hammer, P. C.	950
Aoki, K.	284	Santaló, L. A.	622	Biernacki, M.	950
Gohier, S.	396	Schwartz, M.-H.	623		

Geometry on surfaces, characterization by intrinsic properties.

Sulikovskii, V. I.	69	Hwang, Cheng-		Bakel'man, I. Ya.	622
Vidav, I.	279	chung.	284	Manara, C. F.	622
Süss, W.	279	Chern, S.		Rinow, W.	1148
Knothe, H.	279	Hartman, P.			
Bakel'man, I. Ya.	283	Wintner, A.	622		

Deformation of surfaces.

Gasapina, U.	69	Vincensini, P.	283	Nitsche, J.	955
Dubnov, Ya. S.	70	Backes, F.	399	Remba, E.	1050
Yanenko, N. N.	70	Dorfman, A. G.	594	Grotemeyer, K.-P.	1148
Pogorelov, A. V.	162	Schwartz, M.-H.	623	Hellwig, G.	1148
Sauer, R.	167	Hlavaty, V.	623		
Nitsche, Joachim.	283	Chern, S.	856		

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Riemannian geometry. Cf. Relativity; vector calculus (tensors).

Green, L. W.	70	Sinyukov, N. S.	515	Singh, K. D.	747
Lemoine, S.	71	Takizawa, S.	515	Otsuki, T.	747
Fenchel, W.	71	Palais, R. S.	515	Mishra, R. S.	747
Willmore, T. J.	71	Dalla Volta, V.	515	Kurita, M.	747
Otsuki, T.	72	Hiramatu, H.	516	Avez, A.	856
Kurita, M.	72	Renaudie, J.	517	Frölicher, A.	857
Lichnerowicz, A.	72	Cartan, H.		Lelong-Ferrand, J.	857
Vranceanu, G.	72	Serre, J.-P.	517	Blanchard, A.	857
Yano, K.	72	Wang, Hsien-		Kodaira, K.	
Yüjööb, Z.	76	Chung.	518	Spencer, D. C.	857
Hopf, H.	168	Eckmann, B.	518	Yano, K.	858
de Vries, H. L.	168	Hirzebruch, F.	518	Yano, K.-Mogi, I.	859
Jankiewicz, C.	168	Schwartz, L.	518	Sasaki, S.	956
Matsumoto, M.	169	Blanchard, A.	519	Wakakuwa, H.	956
Walker, A. G.	169	Lichnerowicz, A.		Affi, Z.	956
Eisenhart, L. P.	169		519, 520	Gaffney, M. P.	957
Yano, K.		Legrand, G.	520	*de Rham, G.	957
Ohgane, M.	184	Otsuki, T.		Mihăileanu, N.	1051
Aronszajn, N.		Tashiro, Y.	521	*Rashevskii, P. K.	1051
Milgram, A. N.	252	*Schouten, J. A.	521	Lemoine, S.	1052
Fuller, F. B.	284	Teleman, C.	623	Teleman, C.	1052
Lichnerowicz, A.	284	Teleman, C.	624	Legrand, G.	1052
Moór, A.	285	Vranceanu, G.	624	Haantjes, J.	1151
Prvanovitch, M.	400	Couty, R.	625	Krčuković, G. I.	1151
Gerretsen, J.C.H.	515	Lelong-Ferrand, J.	625	Papy, G.	1152
Pan, T. K.	515	Tomonaga, Y.	625	Ganea, T.	1152
Nash, J.	515	Hermann, R.	626		

Conformal, affine and projective differential geometry.

Dumitrag, V.	71	*Geometry of		Terracini, A.	854
Cech, E.	71	complex		Su, Buchin.	854
Iwahori, N.	71	domains.	516	Yano, K.	858, 859
Cossu, A.	72	Muto, Y.	516	Vaona, G.	955
Nijenhuis, A.	72	Yano, K.		Petrescu, St.	1050
Kuiper, N. H.	73	Hiramatu, H.	516	Bell, P. O.	1051
Mikami, M.	73	*Schouten, J. A.	521	Grindei, I.	1051
Cech, E.	168	Petrescu, St.	624	Godeaux, L.	1149
Kuiper, N. H.	282	Petrescu, St.	624, 625	Mishra, R. S.	1149
Struik, D. J.	284	Roth, M.	747	Geldel'man, R.M.	1149
Süss, W.	285	Atanasyan, V. A.	747	Mokriščev, K. K.	1149
Kurita, M.	401	Pisareva, N. M.	748	Petrantschin, B.	1149
Manara, C. F.	514	Cech, E.	748	*Bol, G.	1150
Marcus, F.	514	Tachibana, S.	748	Villa, M.	1150
Mihăilescu, T.	514	Nožička, F.	854	Argiriade, E.	1150
Vytichlo, F.	514	Manara, C. F.	854	Vranceanu, G.	1151
		Muracchini, L.	854	Debever, R.	1152
		Blaschke, W.	854		

Paths and connections. Cf. Vector calculus (tensors).

Mikami, M.	73	*Geometry of		Yano, K.	858
Kawaguchi, A.	73	complex		Schouten, J. A.	
Martinelli, E.	73	domains.	516	Yano, K.	858
Garabedian, P.R.		Yano, K.		Yano, K.	859
Spencer, D. C.	74	Hiramatu, H.	516	Yano, K.-Mogi, I.	859
Kodaira, K.	74	Kanitani, J.	516	Yano, K.	
Kodaira, K.		Gotō, Y.	516	Davies, E. T.	859
Spencer, D. C.	75	Mizoguti, Y.	517	Sasayama, H.	859, 860
Ehresmann, C.	75	Legrand, G.	520	Tandai, K.	860
Aragno, A.	75	Liebermann, P.		Otsuki, T.	860
Flanders, H.	75		520, 521	Affi, Z.	956
Pastori, M.	169	Dedecker, P.	521	Santaló, L. A.	956
Haantjes, J.	170	Otsuki, T.		Petrescu, St.	1050
Prasad, A.	170	Tashiro, Y.	521	Legrand, G.	1052
Varga, O.	170	*Schouten, J. A.	521	Nožička, F.	1052
Egorov, I. P.	170, 171	Kodaira, K.	618	Hano, J.	
Horie, N.	171	Vranceanu, G.	623	Morimoto, A.	1053
Nijenhuis, A.	171, 172	Liebermann, P.	625	Vranceanu, G.	1053
Ambrose, W.		Ehresmann, C.	625	Schouten, J. A.	
Singer, I. M.	172	Apte, M.	625	Yano, K.	1053
Igusa, J.	172	Sasayama, H.	626	Kobayashi, S.	1053
Guggenheimer, H.	172	Deicke, A.	626	Takasu, T.	1053
Sasayama, H.	402	Ohkubo, T.	627	Haimovici, A.	1151
Rashevskii, P. K.	402	Pisareva, N. M.	748	Kobayashi, S.	1151
de Rham, G.	402	Tachibana, S.	748	Vranceanu, G.	1151
Palais, R. S.	515	Vasil'eva, M. V.	748	Debever, R.	1152

Finsler spaces, abstract spaces and other generalizations. Cf.

Calculus of variations (generalized); geometry (abstract metrics); vector calculus (tensors).

Rund, H.	76	Süss, W.	285	Yano, K.	
Golab, S.	76	Moór, A.	285	Davies, E. T.	626
Yano, K.		Akbar-Zadeh, H.	285	Takano, K.	626
Tashiro, Y.	76	Hiramatu, H.	285	Vasil'eva, M. V.	748
Haantjes, J.	76	Kawaguchi, A.	286	Yano, K.	
Varga, O.	170	Busemann, H.	399	Davies, E. T.	859
Barthel, W.	173	Laugwitz, D.	512	Sasayama, H.	
Sods, G.	173	Barthel, W.	516	Tonooka, K.	859, 860
Ingarden, R. S.	173	Hiramatu, H.	516	Tandai, K.	860
Kawaguchi, A.	173	Moór, A.	516	Rapcsák, A.	959
Pidek, H.	173, 174	Mihăileanu, N.N.	517	Blaschke, W.	1053
Debever, R.	284	Neumann, M.	517		



**DIFFERENTIAL INVARIANTS.** See: invariants (differential).

**DIFFERENTIATION AND INTEGRATION OF FRACTIONAL ORDER.**

Fabian, W. 461 Mambriani, A. 575 Matsuyama, N. 1015

**DIFFRACTION.** See: acoustics (diffraction); electricity and magnetism (diffraction).

**DIFFUSION.** Cf. Heat conduction; probability (Markov chains); statistical mechanics.

Feller, W.	150	Vosida, K.	370	Davies, D. R.	930
Scheidegger, A. E.	190	Payne, L. E.	420	Rounds, W., Jr.	1118
Glück, V.	287	Feller, W.	468	Case, K. M.-de	
Davies, D. R.	305	Keilson, J.	710	Hoffmann, F.	
O'Sullivan, D. G.	370	Knighting, E.	829	Placzek, G.	1186
Lochs, G.	370				

**DIMENSIONAL ANALYSIS.**

Drobot, S.		Fleischmann, R.	426	Esnaul-	
Warmus, M.	55	Drobot, S.	426	Pelteric, R.	651
Drobot, S.	96	Eskenazi, M.	426	Jacob, M.	1044
Truesdell, C.	174	van Dantzig, D.	427	Landolt, M.	1074
Whyte, L. L.	199	Drobot, S.		Eskenazi, M.	1074
Döring, W.	426	Warmus, M.	500		

**DIOPHANTINE APPROXIMATIONS.** Cf. Continued fractions (approximations; metric theory); number theory (geometry of numbers).

Davenport, H.	223	Poitou, G.	574	*Lutz, E.	1003
Mönkemeyer, R.	223	Cassels, J. W. S.	574	Séminaire A.	
Szász, P.	224	Davenport, H.	803	Châtelet et	
Szász, P.	341	Descombes, R.	803	P. Dubreil,	
Kogoniya, P. G.	451	Tornheim, L.	1003	1953/1954.	1082
Günther, A.	451	Mahler, K.	1003	Obrechhoff, N.	1090
Jarník, V.	452	de Vries, D.	1003	Müller, M.	1090

**Equidistribution problems.**

Roth, K. F.	575	Salem, R.	804
Hlawka, E.	575	Lehmer, D. H.	998

**Irrationality and transcendence problems.**

LeVeque, W. J.	18	Beatty, S.	452	Perron, O.	1090
Sidlovskii, A. B.	117	Tornheim, L.	908	Monographs on	
Hanson, H. A.	223	Diananda, P. H.		modern	
Breusch, R.	224	Oppenheim, A.	908	mathematics.	1143
Meulenbeld, B.	224	Schneider, T.	1004		

**DIOPHANTINE EQUATIONS.** See: number theory (Diophantine equations).

**DIRECT DIFFERENTIAL GEOMETRY.** See: differential geometry (set-theoretical methods).

**DIRICHLET SERIES.** Cf. Almost periodic functions; Fourier integrals; number theory (theory of primes; analytic theory; analytical tools).

Agmon, S.	28	Tanaka, C.	125	Mandelbrojt, S.	815
Snehlata	29	Korevaar, J.	239	Leont'ev, A. F.	1093
Panday, N.	29	Borwein, D.	466	Ostrowski, A.	1094
Brauer, G.	125	Blambert, M.	583		

**Zeta functions and other special Dirichlet series.**

Iseki, K.	116	Popken, J.	905	Lekkerkerker,	
Eichler, M.	116	Rodosskii, K. A.	906	C. G.	1010
Putnam, C. R.	346	Leptin, H.	906	Briggs, W. E.	
Turán, P.	449	Briggs, W. E.		Chowla, S.	
Korevaar, J.	465	Chowla, S.	999	Kempner, A. J.	
Romanov, N. P.	676	Turán, P.	999	Mientka, W. E.	1014
Parodi, M.	798			Emersleben, O.	1106

**DISTRIBUTION FUNCTIONS.** See: Fourier integrals (Fourier-Stieltjes integrals); moments; probability (distribution functions); statistics (frequency functions).

**DIVERGENT SERIES.** See: series (convergence).

**DIVISIONS OF SPACE.** See: geometry (regular figures); groups (crystallography).

**DOUBLE STARS.** See: astronomy.

**DYNAMICAL METEOROLOGY.** See: geophysics (meteorology).

**DYNAMICS.** See: astronomy; mechanics; symbolic dynamics.

**ECONOMICS.** Cf. Actuarial mathematics (mathematics of finance); games.

Brown, T. M.	55	Debreu, G.	500	Whitin, T. M.	665
*Tustin, A.	56	Marschak, J.		Bernstein, C.	732
Bellman, R.	155	Mickey, M. R.	500	Morse, P. M.	733
Jensen, A.	155	Solomon, M. J.	500	Modigliani, F.	
Nataf, A.	155	Operations		Hohn, F. E.	733
Frisch, R.	155	research for		Beckmann, M.	843
de Jongh, B. H.	273	management.	501	Cherubino, S.	943
Arrow, K. J.	274	Symposium on		Guilbaud, G.	943
Muth, J. F.	274	operations		Arrow, K. J.	943
Suits, D. B.	274	research.	501	Friedmann, M.	944
Neisser, H.	274	Operations		Allais, M.	944
Solow, R. M.		research		Wold, H.	944
Samuelson,		conference.	501	Samuelson, P. A.	944
P. A.	274	Wong, Y. K.	558	Morlat, G.	944
*Wold, H.		Thrall, R. M.		Marschak, J.	944
Jurén, L.	274	Coombs, C. H.		Frisch, R.	945
Inada, K.	386	Davis, R. L.,		Boiteux, M.	945
Jacobs, W.	386	editors.	605	Ville, J.	945
Palásti, I.-Rényi,		Balderston, J.	606	Van Dantzig, D.	945
A.-Szentmár-		Eckstein, O.	606	Allais, M.	945
tony, T.		Balderston, J. B.		Theil, H.	1040
Takács, L.	386	Whitin, T. M.	606	Fréchet, M.	1135
Zieman, M.	386	Morgenstern, O.	607	Prager, W.	1135
Simon, H. A.	500	Ferreira Murteira,		Kneser, H.	1135
Isard, W.	500	B. J.-Amaro		von Mises, L.	1136
Wold, H. O.	500	De Matos, A.	607		

**EIGENVALUES.** See: algebra: linear (characteristic values); differential equations (boundary value problems); functional analysis (existence theorems); integral equations; numerical methods (systems); differential and integral equations).

**ELASTICITY, PLASTICITY.** Cf. Geophysics; hydrodynamics (viscous fluids).

*Green, A. E.-		Parkus, H.	306	*Mushel'svili,	
Zerna, W.	306	*Landau, L. D.-		N. I.	1067
*Melan, E.-		Lifshic, E. M.	412		

**General theory.** Cf. Mechanics of continua.

Jindra, F.	88	Green, A. E.-		Nowinski, J.-	
Rivlin, R. S.-		Wilkes, E. W.	421	Turski, S.	765, 766
Topaloglu, C.	88	Hearmon, R. F. S.	421	Marziani, M.	766
Ericksen, J. L.-		Manacorda, T.	421	Hu, Hai-Chang.	766
Rivlin, R. S.	88	Babić, V. M.	538	Roesler, F. C.	866
Green, A. E.	89	Mossakovskii, V. I.	539	Truesdell, C.	880
Green, A. E.-		Nowacki, W.	539	Rivlin, R. S.-	
Spratt, E. B.	89	Tolokonnikov,		Ericksen, J. L.	881
Baker, M.-		L. A.	539	Nabarro, F. R. N.	883
Ericksen, J. L.	89	Szebehely, V. G.-		Reiner, M.	973
Babić, V. M.	90	Pletta, D. H.	638	Castoldi, L.	973
Torre, C.	95	Ericksen, J. L.	643	Adkins, J. E.	973
Sawaragi, Y.-		Biot, M. A.	643	Ionescu, D. G.	973
Tokumaru, H.	95	Hu, Hai-Chang.	643	Sternberg, E.-	
Knopoff, L.	95	Sonntag, R.	644	Eubanks, R. A.	973
Franciosi, V.	95	Leibfried, G.	650	Cotter, B. A.-	
Berio, A.	196	Eshelby, J. D.	650	Rivlin, R. S.	1067
Swann, W. F. G.	197	*Swaininger, K.	764	Marguerre, K.	1068
*Swaininger, K.	307	Noll, W.	764	Lodge, A. S.	1068
Mişicu, M.	307	Green, A. E.	764	Head, A. K.-	
Langhaar, H. L.-		Jindra, F.	765	Louat, N.	1073
Stippes, M.	308	Adkins, J. E.-		Adkins, J. E.	1175
Nowacki, W.	308	Green, A. E.-		Ericksen, J. L.	1175
Colonnetti, G.	308	Nicholas, G. C.	765	Nowinski, J.-	
Slobodianskii,		Signorini, A.	765	Ol'szak, W.	1175
M. G.	308	Meixner, J.	765	Mossakowska, Z.	1175
Krüner, E.	308	Bressan, A.	765	Zapalowicz, W.	1175
				Biot, M. A.	1189

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Hu, Hai-chang.	92	Reissner, H.-		Lakshmana Rao,	
Abramyan, B. L.	92	Reissner, E.	422	S. K.-Sundara	
Yeh, Kai-yuan.	92	Gulkanyan, N. O.	539	Raja Iyengar,	
Weiss, G.-		Nowinski, J.	539	K. T.	767
Payne, L. E.	309	Nowacki, W.	539	Narasimhamur-	
Yu, Yi-Yuan.	309	Chien, Wei-Zang.	644	thy, P.	767
Sonntag, R.	309	Suharevskii, I. V.	644	Craven, A. H.	767
Gulkanyan, N. O.	422	Rostovcev, N. A.	767	Huber, A.	767
Aleksandryan,		Sevlyakov, Yu. A.-		Netrebko, V. P.	881
E. A.-Gulkany-		Zigel, F. S.	767	Barta, J.	923
yan, N. O.	422			Pestel, E.	1069



ELASTICITY, PLASTICITY. (Continued)

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| Mikeladze, M. S.  | 92  | Radenković, D.    | 645 | Iwiński, T.     |      |
| Monat, E. T.      | 94  | *Korotkin, Ya. I. |     | Nowiński, J.    | 975  |
| Kammerer, A.      | 197 | Lokšin, A. Z.     |     | Plątek, M.      | 975  |
| Capildeo, R.      | 309 | Sivers, N. L.     | 648 | Tekinalp, B.    | 1068 |
| Chandra Das, S.   | 422 | *Cesari, L.       |     | Wasutyński, Z.  | 1176 |
| Serman, D. I.     | 645 | Conforto, F.      |     | Zanaboni, O.    | 1176 |
| Arutyunyan, N. H. |     | Minelli, C.       | 769 | Minasyan, R. S. | 1176 |
| Gulkan-yan, N. O. | 645 | Scott, E. J.      |     |                 |      |
|                   |     | Carver, D. R.     | 926 |                 |      |

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| Courbon, J.       | 197 | Sokolowski, M.     | 644 | Radok, J. R. M.   | 1069 |
| Onat, E. T.       | 308 | Arf, C.            | 766 | Conway, H. D.     | 1069 |
| Green, A. E.      |     | Podstrigač, Ya. S. | 766 | Hieke, M.         | 1069 |
| Wilkes, E. W.     | 421 | Föppl, L.          | 766 | Mitra, D.         | 1069 |
| Acharya, Y. V. G. |     | Sonntag, G.        | 881 | Kupradze, V. D.   |      |
| Srinath, L. S.    | 539 | Pyhtunov, M. T.    | 974 | Baselavili, M. O. | 1176 |
| Salzmann, F.      | 643 | Hampe, E.          | 974 |                   |      |
| Natanzon, V. Ya.  | 644 |                    |     |                   |      |

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|--------------------|-----|-------------------|-----|------------------|------|
| Hardiman, N. J.    | 90  | Irving, J.        |     | Jung, H.         | 882  |
| Nocilla, S.        | 90  | Mullineux, N.     | 540 | Hajdin, N.       | 974  |
| Müller, W.         | 91  | Poplavskii, R. P. | 540 | Hampe, E.        | 974  |
| Yeh, Kai-yuan.     | 91  | Grigolyuk, E. I.  | 540 | Mossakowski, J.  | 974  |
| Wassel, A. D.      | 91  | Levi, B.          | 646 | Mansfield, E. H. |      |
| Dean, W. R.        |     | Winslow, A. M.    | 647 | Kleeman, P. W.   | 974  |
| Harris, G. Z.      | 197 | Szeglowski, F.    | 647 | Hampel, M.       | 974  |
| Dean, W. R.        | 309 | Cywińska, Z.      |     | Vinokurov, S. G. | 1070 |
| Nowacki, W.        | 310 | Mossakowski, J.   | 768 | Müller, W.       |      |
| Negoro, S.         | 310 | Kączkowski, Z.    | 768 | Krettnner, J.    | 1070 |
| Bloh, V. I.        | 310 | Uzdalev, A. I.    | 768 | Favre, H.        |      |
| Baldacci, R. F.    | 310 | Nowacki, W.       |     | Schumann, W.     | 1070 |
| Cerná, G.          | 310 | Mossakowski, J.   | 768 | Chien, W. Z.     |      |
| Stippes, M.        |     | Paria, G.         | 769 | Yeh, K.-Y.       | 1070 |
| Beckett, R. E.     | 423 | Hara, I. S.       | 882 | Nowacki, W.      | 1070 |
| Čankvetadze, G. G. | 539 | Lihačev, V. A.    | 882 | Levi, B.         | 1176 |
| Kalandiya, A. I.   | 540 | Lehnickii, S. G.  | 882 | Tiffen, R.       | 1177 |
| Burmistrov, E. F.  | 540 | Sen Gupta, A. M.  | 882 | Matildi, P.      | 1177 |
| Lehnickii, S. G.   | 540 | Cleaves, H. F.    | 882 | Alexander, J. M. |      |
|                    |     |                   |     | Ford, H.         | 1177 |

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|------------------------------|-----|-----------------------|-----|------------------|------------|
| Kaplan, A.                   |     | *Gol'denveiser, A. L. |     | Sigua, F. D.     | 881        |
| Fung, Y. C.                  | 91  | Ambarcumyan, S. A.    | 646 | Solomon, L.      | 974        |
| Naghdi, P. M.                |     | Berry, J. G.          | 91  | Galimov, K. Z.   | 974        |
| Rüdiger, D.                  | 92  | Darevskii, V. M.      | 646 | Wuest, W.        | 975        |
| Layrangues, Grigolyuk, E. I. | 197 | Zenova, E. F.         | 646 | Federhofer, K.   | 975        |
| Zgenti, V. S.                | 422 | Novošíl, V. V.        | 646 | Szmelter, J.     | 1069       |
| Hart, V. G.                  | 422 | Nowiński, J.          | 646 | Alfutoy, N. A.   | 1069       |
| Serafimov, P. R.             | 422 | Storch, E.            | 646 | Reissner, E.     | 1069, 1070 |
| Olzak, W.                    | 422 | Rüdiger, D.           | 646 | Vinokurov, S. G. | 1070       |
| Mihlin, S. G.                | 490 | Ambarcumyan, S. A.    | 768 | Rüdiger, D.      | 1176       |
| Grigolyuk, E. I.             | 540 | Naghdi, P. M.         |     | Kennard, E. H.   | 1176       |
| Alumya, N. A.                | 541 | De Silva, C. N.       | 768 | Alumya, N. A.    | 1176       |
| Mikeladze, M. S.             | 541 | Nowiński, J.          | 768 | Koiter, W. T.    | 1176       |

Three-dimensional problems.

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Cotlar, M.	146	I., Jr.	375	Churchill, R. V.	921
Ahieser, N. I.	242	Mautner, F. I.	692	Ehrenpreis, L.	1017
Borok, V. M.	253	Koizumi, S.	921	Methée, P.-D.	1101
Hewitt, E.		Sunouchi, G.	921		
Hirschman, I.					

FOURIER SERIES, TRIGONOMETRIC SERIES. Cf. Almost periodic functions; numerical methods (practical harmonic analysis).

*Szökefalvi-Nagy, B.	576	Harkevič, A. A.	693	Tolstow, G. P.	919
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#### FOURIER SERIES, TRIGONOMETRIC SERIES. (Continued)

##### Trigonometric polynomials.

Berman, D. L.	48	Kipriyanov, I. A.	241	C.	353
Nikolaev, V. F.	126	Hyltén-Cavallius, C.	353	Stečkin, S. B.	815

##### Extremal problems. Cf. Inequalities.

Rogosinski, W. W.	29	Klein, G.	241	Putnam, C. R.	692
Rogosinski, W. W.	30	Haršiladze, F. I.	241	Syneček, V.	816
Izumi, S.	240	Hyltén-Cavallius, C.	353	Lorch, L.	1016
Hille, E.				Erdős, P.-Gál, I. S.	1016

##### Trigonometric interpolation.

Timan, A. F.	920
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##### Fourier coefficients, degree of approximation.

Takahashi, T.	30	Zygmund, A.	467	Bojanic, R.	1016
Noble, M. E.	126	U'yanov, P. L.	467	Tomić, M.	1016
Salem, R.	240	Koksma, J. F.	682	Helson, H.	1016
Wolbner, W.	241	James, R. D.	692	Erdős, P.-Gál, I. S.	1016
Tomić, M.	353	Raisbeck, G.	815	Calderón, A. P.	1017
Men'šov, D. E.	467	Syneček, V.	816	Zygmund, A.	1017
Salem, R.		Aljančić, S.		Kinukawa, M.	1101

##### Convergence, summability.

Stečkin, S. B.	30	U'yanov, P. L.	242	Mohanty, R.	919
U'yanov, P. L.	30	Jurkat, W.	351	Nanda, M.	919
Livingston, A. E.	30	Peyerimhoff, A.	353	Satō, M.	920
Heywood, P.	30	Izumi, S.	353	Haršiladze, F. I.	920
Men'šov, D. E.	125	Shukla, U.	353	Matsuyama, N.	1015
Mohanty, R.	126	Misra, B.	465	Izumi, S.	1015
Nanda, M.	239	Erdős, P.	691	Satō, M.	1015
Turán, P.	240	Herzog, F.	691	Zak, I. E.	1015
Hirokawa, H.	240	Piranian, G.	691	Zeller, K.	1015
Sunouchi, G.	240	Satō, M.	692	Heywood, P.	1016
Izumi, S.	240	Verblunsky, S.	816	Izumi, S.	1016
Sunouchi, G.	241	Salem, R.	816	Satō, M.	1100
Yôjôbô, Z.	241	Sunouchi, G.	919	Kinukawa, M.	1100
Leibenzon, Z. L.	241			Sunouchi, G.	1100
Kipriyanov, I. A.	241				

##### Conjugate functions.

Zak, I. E.	126	Calderón, A. P.	1017
Shukla, U.	353	Zygmund, A.	1017

##### Uniqueness theory.

Smyrl, J. L.	466	Kahane, J.-P.	467	Pyateckii-Sapiro, I. I.	691
		Dugué, D.	467		

##### Double series.

Kipriyanov, I. A.	241	Shapiro, V. L.	816	Berkovitz, L. D.	1016
Shapiro, V. L.	242	Zak, I. E.	1015	Gosselin, R. P.	1016
Džurbašyan, M. M.	469				

##### Generalized Fourier series. Cf. Approximation.

Titchmarsh, E. C.	30	Abramov, L. M.	354	Chrestenson, H. E.	920
Littlewood, J. E.	126	Hartman, S.	719	Fine, N. J.	920

#### FRACTIONAL DIFFERENTIATION AND INTEGRATION.

See: differentiation of fractional order.

FREQUENCY FUNCTIONS. See: probability; statistics.

FUNCTION FIELDS. See: algebra: abstract (fields); algebraic functions; number theory (analytic theory).

FUNCTIONAL ANALYSIS. Cf. Continuous geometry; differential equations (differential operators); ergodic theory; measure (abstract theory); symbolic dynamics; topology.

*Hill, E.	262	*Fichera, G.	715	*Riesz, F.	837
Ważewski, T.	575			Sz.-Nagy, B.	837

General abstract spaces. Cf. Differential geometry (Finsler spaces); functions of real variables (integration in abstract spaces); geometry (abstract metrics); sets; topology (topological spaces).

Hörmander, L.	27	Guy, R.	145	Hukuhara, M.	992
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## FUNCTIONAL ANALYSIS. (Continued)

Linear topological spaces. Cf. Algebra: abstract (topological problems).

Nikodým, O. M.	47	Köthe, G.	715	Ehrenpreis, L.	
Dieudonné, J.	47	Wolfson, K. G.	715	Mautner, F. I.	1017
Altman, M.	142	Ghika, A.	715	Collins, H. S.	1030
Nachbin, L.	156	Cristescu, R.	715	Klee, V. L., Jr.	1030
Pták, V.	262	Köthe, G.	831	Shirota, T.	1030
Schwartz, L.	265	Hörmander, L.	831	Nikaidō, H.	1030
Shirota, T.	275	Klee, V. L., Jr.	832	Iséki, K.	1030
Finkbeiner, D. T.		Ehrenpreis, L.	834	Sebastião e Silva, J.	1122
Nikodým, O. M.	373	Warner, S.			
Andó, T.	373	Blair, A.	932	Ehrenpreis, L.	1122, 1123
Jerison, M.	373	Marinescu, G.	932	Landesberg, M.	1123
Hirasawa, Y.	487	Mazur, S.		Roberts, G. T.	1138
Marinescu, G.	487	Orlicz, W.	932	Ishihara, T.	1139
Pták, V.	595	Klee, V. L.	950		
Grothendieck, A.	596				

Normed linear spaces.

Alexiewicz, A.		Laugwitz, D.	595	Lax, P. D.	832
Orlicz, W.	47	Campos		Yood, B.	832
Kurzweil, J.	47	Ferreira, J.	595	Rosenbloom, P.	832
Cronin, J.	47	Brace, J. W.	595	Krasnosel'skii, M. A.	833
Michal, A. D.		Halperin, I.		Hille, E.	833
Hyers, D. H.	48	Miller, N.	596	Phillips, R. S.	833
Floyd, E. E.		Grothendieck, A.	596	Mazur, S.	
Klee, V. L.	59	Lovaglia, A. R.	596	Orlicz, W.	932
Audin, M.	142	Pinsker, A. G.	596	Sikorski, R.	932
Dunford, N.	142	Laugwitz, D.	613	Kurzweil, J.	932
Bade, W. G.	143, 144	Wolfson, K. G.	715	Smul'yan, Yu. L.	933
Schwartz, J.	144	Day, M. M.	716	Graves, L. M.	933
Felner, E.	220	Marinescu, G.	716	Harazov, D. F.	933
Harazov, D. F.	262	MacDowell, R.	716	Miyadera, I.	1031
Altman, M.	262	MacNerney, J. S.	716	Francck, E.	1031
Kraskovskii, S. N.	263	Ozaki, S.		Rutman, M. A.	1113
Mourier, E.	268	Kashiwagi, S.		*Kolmogorov, A.	1122
Werner, J.	373	Tsuboi, T.	716	N. Fomin, S. V.	1122
Miyadera, I.	374	Ringrose, J. R.	716	Bartle, R. G.	
Povolockii, A. I.	488	Kendall, D. G.	717	Dunford, N.	
Aronszajn, N.		Berge, C.	717	Schwartz, J.	1123
Smith, K. T.	488	Jacobs, K.	719	Shimoda, I.	1123
Schreiber, S.	488	Kasahara, S.	832	Polak, A. I.	1123
Feller, W.	488	Tatarkiewicz, K.	832		
Deprit, A.	489				

Hilbert spaces.

Halmos, P. R.		Krasnosel'skii, M. A.	490	Julia, G.	835
Lumer, G.	48	Lippmann, H.	490	Nakamura, M.	
Straus, A. V.	48	Mihlin, S. G.	490	Turumaru, T.	835
Livšic, M. S.	48	Colmez, J.	491	Taldykin, A. T.	836
Gårding, L.		Lyance, V. E.	491	Müller, H.	836
Wightman, A.	49	Szőkefalvi-Nagy, B.	491	Livšic, M. S.	836
Deprit, A.	49	Nagy, B.	491	Brodskiĭ, M. S.	836
Werner, J.	143	Palu de La Barrière, R.	491	Sz. Nagy, B.	837
Kakutani, S.	143	*Achieser, N. I.	491	Schäffer, J. J.	934
Bade, W. G.	143, 144	Glasman, I. M.	596	Kilpi, Y.	934
Schwartz, J.	144	Meschkowski, H.	596	Harazov, D. F.	934
Vorob'ev, Yu. V.	144	Cordes, H. O.	597	Gaffney, M. P.	957
Putnam, C. R.	146	Hayes, R. M.	597	Izumi, S.	
Mautner, F. I.	146	Ozaki, S.		Matsuyama, N.	1015
Krein, S. G.	262	Kashiwagi, S.		Iohvidov, I. S.	1032
Rellich, F.	263	Tsuboi, T.	597	Kasahara, S.	1032
Schröder, J.	264	Pitcher, T.	597	Naimark, M. A.	1032
Gavurin, M. K.	264	Naimark, M. A.	597	Fourès, Y.	
Daleckiĭ, Yu. L.	264	Horváth, J. I.	718	Segal, I. E.	1032
Fage, M. K.	264	Maak, W.	719	Kadison, R. V.	1033
Fantappiè, L.	264	Jacobs, K.	719	Fichera, G.	1124
Misonou, Y.	264	Kadison, R. V.	719	Farinha, J.	1124
Jacobs, K.	374	Fan, Ky.	719	Svirskii, I. V.	1124
Valnberg, M. M.	374	Hoffman, A. J.	784	Vorob'ev, Yu. V.	1124
Nemyckii, V. V.	374	Wielandt, H.	785	Misonou, Y.	1125
Szőkefalvi-Nagy, B.	374	Lorch, E. R.	834	Nakamura, M.	1126
Fichera, G.	374	Bram, J.	835	Turumaru, T.	1126
Nikodým, O. M.	490	Brownell, F. H.	835	Takeda, Z.	1126
Putnam, C. R.	490			Fujita, H.	1154

Other special spaces. Cf. Functions of real variables (functions in abstract spaces).

Berman, D. L.	48	Williamson, J. H.	145	Krasnosel'skii, M. A.	263
Ladyženskii, L. A.	48	Reiter, H.	220	Fullerton, R. E.	263
Eisenstadt, B. J.	59	Sikorski, R.	229	Dieudonné, J.	265
Nikolaev, V. F.	126	Włodarski, L.	238	Shirota, T.	275
Malgrange, B.	127	Haršiladze, F. I.	241	Yosida, K.	370
Leader, S.	145	Achieser, N. I.	242	Ishihara, T.	373
Kampé de Fériet, J.	145	Kanazawa, T.		Arens, R.	
Dubreil-Jacotin, M.-L.	145	Iwasaki, A.	261	Singer, I. M.	373
Arbault, J.	145	Murakami, H.		Loud, W. S.	375
Régner, A.	145	Krasnosel'skii, M. A.		Cameron, R. H.	375
		Rutickii, Ya. B.	263	Hewitt, E.	

## FUNCTIONAL ANALYSIS. (Continued)

Other special spaces. (Continued)

Hirschman, I., Jr.	375	Krasnosel'skii, M. A.		Dorleijn, M.	933
Grothendieck, A.	489	Sobolev, V. I.	718	Fullerton, R. E.	933
Džvaršelsvili, A. G.	490	Hörmander, L.	720	Citlanadze, E. S.	934
Felner, E.	490	Gurevič, B. L.	720	Vainberg, M. M.	934
Rudin, W.	578	Fleming, W. H.		Baher, F. S.	1031
Neveu, J.	716	Young, L. C.	721	Maharam, D.	1031
Davis, P.	717	Fleming, W. H.	732	Krabbe, G. L.	1031
Tillmann, H.-G.	718	Rudin, W.	810	Iohvidov, I. S.	1032
Arbault, J.	718	Ehrenpreis, L.	834	Rooney, P. G.	1102
Kampé de Fériet, J.	718	Orlicz, W.	834	Mergelyan, S. N.	1104
Raman, P. K.	718	Kalugina, E. P.	834	Saginyan, A. L.	1105
		Bochner, S.	834	Ehrenpreis, L.	1122
				Kakutani, S.	1125

Partially ordered spaces. Cf. Partially ordered sets.

Nakano, H.	49	Mařík, J.	492	Kasahara, S.	832
Yamanuro, S.	50	Pinsker, A. G.	560	Bonsall, F. F.	936
Bauer, H.	50	Cristescu, R.	721	Rutman, M. A.	1126
Thoma, E.	376				

Normed rings, Banach algebras.

Umegaki, H.	49	Palu de La Barrière, R.	491	Feldman, J.	
Kaplansky, I.	49	Myers, S. B.	491	Kadison, R. V.	935
Dunford, N.	142	Yoshizawa, H.	491	Nakamura, M.	
Takeda, Z.	146	Rosenberg, A.	563	Turumaru, T.	936
Cotlar, M.	146	Pitcher, T.	597	Umegaki, H.	936
Segal, I. E.	149	Naimark, M. A.	597	Stinespring, W. F.	1033
Gillman, L.		Singer, I. M.	597	Ylen, T.	1033
Henriksen, M.	156	Dye, H. A.	598	Blum, E. K.	1033
Helgason, S.	265	Ogasawara, T.	598	Arens, R. F.	
Wermer, J.	265	Kadison, R. V.	716	Calderón, A. P.	1102
Fujiwara, K.	265	Yood, B.	719	Yood, B.	1125
Dieudonné, J.	265	Lumer, G.	719	Kakutani, S.	1125
Schwartz, L.	265	Hartman, S.	719	Singer, I. M.	
Umegaki, H.	265	Urbanik, K.	935	Wermer, J.	1125
Darsow, W. F.	375	Ryll-Nardzewski, C.	935	Vidav, I.	1125
Matsushita, S.	375	König, H.	935	Tomita, M.	1125
Wright, F. B.	375	Blair, A.	935	Misonou, Y.	1125
Umegaki, H.	376	Heider, L. J.	935	Nakamura, M.	1126
Fukamiya, M.		Keown, E. R.	935	Turumaru, T.	1126
Misonou, Y.				Takeda, Z.	1126
Takeda, Z.	376			Ogasawara, T.	
				Yoshinaga, K.	1126

Equations in infinitely many variables. Cf. Differential equations (differential operators).

Cherubino, S.	47	Cherubino, S.	261	Hajdin, N.	974
Wolbner, W.	241	Magnus, W.	261	Grenander, U.	1122
*Paasche, I.	260	Rado, F.	829		

Existence theorems for differential, integral and functional equations; spectral theory.

Mihlin, S. G.	40, 41	Altman, M.	262	Naimark, M. A.	702
Cronin, J.	47	Krein, S. G.	262	Horváth, J. I.	718
Michal, A. D.		Kraskovskii, S. N.	263	Rosenbloom, P.	832
Hyers, D. H.	48	Rellich, F.	263	Krasnosel'skii, M. A.	833
Livšic, M. S.	48	Schröder, J.	264	M. A.	
Browder, F. E.	134	Gavurin, M. K.	264	Taldykin, A. T.	836
Calderón, A. P.	136	Page, M. K.	264	Müller, H.	836
Altman, M.	142	Barrar, R. B.		Livšic, M. S.	836
Audin, M.	142	Dolph, C. L.	313	Graves, L. M.	933
Dunford, N.	142	Tautz, G. L.	371	Harazov, D. F.	933
Wermer, J.	143	Valnberg, M. M.	374	Rutman, M. A.	1113
Kakutani, S.	143	Nemyckii, V. V.	374	Polak, A. I.	1123
Bade, W. G.	143, 144	Povolockii, A. I.	488	Fomin, S. V.	1124
Schwartz, J.	144	Deprit, A.	489	Fichera, G.	1124
Guy, R.	145	Grothendieck, A.	489	Rutman, M. A.	1126
Vorob'ev, Yu. V.	146	Lyance, V. E.	491	Fujita, H.	1154
Harazov, D. F.	262				

FUNCTIONAL DETERMINANTS. See: calculus.

FUNCTIONAL EQUATIONS: SPECIAL TYPES. Cf. Differences (difference equations; generalized difference equations); functional analysis (existence theorems); operational calculus; special functions (functions defined by functional equations).

Ishiguro, K.	140	Coppel, W. A.	577	Stiefel, E.	931
Heinhold, J.	140	Parodi, M.	588	Erős, P.	
Urabe, M.	141, 142	Sierpinski, W.	681	Golomb, M.	931
Zitarsos, A.	260	Belman, R.	714	Aczél, J.	989
Hosszú, M.	371	Ghermănescu, M.	714	Aczél, J.	1128
van Rooijen, J. P.	497	Hosszú, Miklós	931		

FUNCTIONAL SPACES. See: differential geometry (Finsler spaces); functional analysis; measure and integration; topology (topological spaces; applications).



**FUNCTIONS OF COMPLEX VARIABLES.** Cf. Algebraic functions; Dirichlet series; elliptic functions; Fourier integrals; integral transforms (Laplace integrals; Mellin transforms; self-reciprocal functions); harmonic functions; number theory (analytic tools).

*Privalov, I. I.	121	*Richard, U.	577	*Heffter, L.	807
Polak, A. I.	231	Hasimoto, K.		Menger, K.	807
*Caratheodory, C.	346	Kato, S.		Kants, G.	807
Stone, M. H.	346	Matuura, S.	683	*Noshiro, K.	912
*Stoilow, S.	458	Arsove, M. G.	683	Whyburn, G. T.	1140

**Power series.** Cf. Series (power series).

Ricci, G.	24	Berg, L.	578	Erdős, P.	
Berg, L.	24	Roux, D.	578	Herzog, F.	
Lammel, E.	120	Herzog, F.	578	Piranian, G.	691
Hahn, W.	231	Erdős, P.		Rudin, W.	810
Borozdin, K. V.	458	Macintyre, A. J.	579	Kössler, M.	914
Badalyan, G. V.	578	Noble, M. E.	683	Akaza, T.	1094

**Zeros.** Cf. Polynomials (zeros).

Pontryagin, L. S.	23	Capyrin, V. N.	807	C. G.	1010
Goldenberg, H.	23	Edrei, A.	914	Erdős, P.	
Ganelius, T.	23	Bajanski, B.	1010	Herzog, F.	
Serghiesco, S.	118	Tomid, M.	1010	Piranian, G.	1093
Combes, J.	577	Lekkerkerker, J.		Mac Lane, G. R.	1093

**Analytic continuation, singularities, overconvergence.**

Ricci, G.	24	Pogorzelski, W.	346	Šmul'yan, Yu. L.	683
Pandey, N.	121, 122	Šcottlaender, S.	346	Noble, M. E.	683
Pi Calleja, P.	231	Denjoy, A.	578	*Bieberbach, L.	913
Herzog, F.		Davis, P.		Talmanov, A. D.	1093
Piranian, G.	231	Pollak, H.	580	Ostrowski, A.	1094
Rosenbloom, P. C.	231	Pogorzelski, W.	683		

**Cauchy integral and related topics.** Cf. Calculus (contour integrals).

Dinghas, A.	231	Picone, M.	459	Karcivadze, I. N.	
Müller, C.	346	Denjoy, A.	683	Hvedelidze, B. V.	807

**Schwarz lemma, maximum principle, and related topics.**

Lohwater, A. J.	914
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**Conformal mapping: general theory.**

Hersch, J.	26	Gerstenhaber, M.		Warschawski, S. E.	811
Juve, Y.	26	Rauch, H. E.	349	Tsuji, M.	811
Kubo, T.	122	Hartman, P.		Brown, L. J. M.	811
Gergen, J. J.		Wintner, A.	461	Walsh, J. L.	811
Dressel, F. G.	134	Walsh, J. L.	581	Leja, F.	917
Tammi, O.	233	Pratje, I.	685	Strebel, K.	917
Schiffer, M.	233	af Hällström, G.	685	Heins, M.	1011
Fuks, B. A.	233	Garnier, R.	685	*Lelong, J.	
Meschkowski, H.	348	Agmon, S.	686	Ferrand, J.	1096
Leja, F.	348	Geronimus, Ya. L.	686	Robinson, R. M.	1096
Walsh, J. L.	348	Tietz, H.	688	Royden, H. L.	1096
Gaier, D.	348	Pfluger, A.	810	Titus, C. J.	1096
Ahlfors, L. V.	348				

**Conformal mapping: special problems and applications.** Cf. Calculus of variations (minimal surfaces); differential geometry.

Garabedian, P. R.		Albrecht, R.	180	Fil'čakov, P. F.	810
McLeod, E., Jr.		Samanski, V. E.	298	Fick, E.	917
Vitousek, M.	82	Garabedian, P. R.	428	Rosenthal, J. E.	1096
Heinhold, J.		Jacobsthal, E.	581		

**Riemann surfaces, uniformization.** Cf. Topology (covering surfaces).

Kuroda, T.	25	Myrberg, L.	471	Ohtsuka, M.	1012
Witt, E.	25	Kuroda, T.	581	Bader, R.	1012
Kuramochi, Z.	26	Mori, A.	581	Endl, K.	1012
Hirzebruch, F.	26	Kuramochi, Z.	588	Kuramochi, Z.	
Caccioppoli, R.	27	Pratje, I.	685		1012, 1013
Myrberg, L.	33, 34	Ohtsuka, M.	686	Bettermann, R.	1013
Brelot, M.		Sakakihara, K.	687	Belinskii, P. P.	
Choquet, G.	34	Lehto, O.	688	Gol'dberg, A. A.	1095
Brelot, M.	35	Tietz, H.	688	Heins, M.	1095
Kuramochi, Z.	233	Biernacki, M.	808	Künzi, H.	1095
Ozawa, M.	245	Radojčić, M.	812	Kaplan, W.	1097
Seibert, P.	349	Andreian, C.	812	Jenkins, J.	
Tsuji, M.	349	Ozawa, M.	819	Morse, M.	1097
Ohtsuka, M.	349	Seibert, P.	917	Nevalinna, R.	1097
Fabian, W.	461	Strebel, K.	917	*Weyl, H.	1097
*Schiffer, M.		Heins, M.	1011	Ozawa, M.	1109
Spencer, D. C.	461	Tietz, H.	1012	Baum, W.	1140

**FUNCTIONS OF COMPLEX VARIABLES.** (Continued)

**Entire and meromorphic functions.**

Malliavin, P.	18	Seidel, W.	460	Clunie, J.	915
Evgrafov, M. A.	25	Heins, M.	460	Redheffer, R. M.	915
Sidlovskii, A. B.	117	Lohin, I. F.	460	Collingwood, E. F.	916
Wilson, R.	122	Erdős, P.		Rudin, W.	916
Shah, S. M.		Macintyre, A. J.	579	Walter, W.	929
Singh, S. K.	122	Clunie, J.	579	Korevaar, J.	1010
Hayman, W. K.	122	Hervé, M.	684	Baker, I. N.	1010
Malgrange, B.	127	Clunie, J.	684	Ilieff, L.	1018
Combes, J.	231	Fuchs, W. H. J.	684	Leont'ev, A. F.	1093
Whittaker, J. M.	232	Ohtsuka, M.	686	Džrbašyan, M. M.	
Kjellberg, B.	347	Lehto, O.	688	Tavadyan, A. B.	1094
Kumar Jain, M.	347	Repin, I. I.	808	Hayman, W. K.	1094
Korevaar, J.	347	Hiong, King-Lai	808	Sales Valdes, F. de A.	1094
Wilson, R.	347	Edrei, A.	809	Clunie, J.	1094
Meschkowski, H.	348	Clunie, J.	809	Heins, M.	1094
Combes, J.	459	Heins, M.	809	Belinskii, P. P.	
Shah, S. M.		Andreian, C.	809	Gol'dberg, A. A.	1095
Singh, S. K.	459	Kennedy, F. B.	809	Heins, M.	1095
Montel, P.	459	Sidlovskii, A. B.	907	Džrbašyan, M. M.	1102
Hiong, King-Lai	460	Lohwater, A. J.	914	Evgrafov, M. A.	1120
Collingwood, E. F.	460	*Boas, R. P., Jr.	914		
Bagemihl, F.		Aspettia, A. G.	915		

**Picard theorem, distribution of values.**

Hervé, M.	684	Künzi, H.	1095	Heins, M.	1095
Lehto, O.	688	Bagemihl, F.	1095	Künzi, H.	1095
Seibert, P.	917	Belinskii, P. P.			
Gol'dberg, A. A.	1095	Gol'dberg, A. A.	1095		

**Univalent functions, bounded functions and related topics.**

Jenkins, J. A.	24	Tammi, O.	347	Rudin, W.	685
Ohtsuka, M.	25	Gelf'fer, S. A.	459	Gabriel, R. F.	807
Polak, A. I.	25	Zmorovič, V. A.	459	Linis, V.	809
Townes, S. B.	25	Kufarev, P. P.		Iliev, L.	809
Wigner, E. P.		Semuhina, N. V.	459	Tsuji, M.	809
v. Neumann, J.	25	Rudin, W.	578	Rudin, W.	810
Rahmanov, B. N.	122	Garabedian, P. R.		Flett, T. M.	916
Kufarev, P. P.	122	Schiffer, M.	579	Nehari, Z.	916
Kaplan, W.	232	Reade, M.	579	Waadeland, H.	916
Terzioğlu, N.	232	Goodman, A. W.		Jung, H. P.	1010
Nehari, Z.	232	Reich, E.	579	Uluçay, C.	1011
Jenkins, J. A.	232	Jenkins, J. A.	579	Springer, G.	1011
Royden, H. L.	232	Jenkins, J. A.	684	Nehari, Z.	1093
Tammi, O.	233	Royster, W. C.	684	Kakutani, S.	1125
Schiffer, M.	233	Goodman, A. W.	685		

**Extremal problems, inequalities.** Cf. Inequalities; polynomials (extremal problems).

Reich, E.	24	Jenkins, J. A.	460	Maksimov, Yu. D.	810
Jenkins, J. A.	24	Hiong, King-Lai	460	Pfluger, A.	810
Kubo, T.	122	Biernacki, M.	808	Kubo, T.	914
Dyson, F. J.	231	Clunie, J.	808	Robinson, R. M.	1096

**Iteration.** Cf. Functional equations.

Baker, I. N.	1010
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**Normal families.**

Hiong, King-Lai.	24	Montel, P.	459
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**Polynomial and other series expansions.** Cf. Approximations; polynomials (polynomial approximations).

Ullman, J. L.	121	Tamadyan, A. P.	687	Kuz'mina, A. L.	1093
Meschkowski, H.	461	Korevaar, J.	1010	Leont'ev, A. F.	1093
Mergelyan, S. N.		Lohin, I. F.	1093		

**Complex interpolation and approximation.** Cf. interpolation.

Landau, H. J.	231	M. M.	580	Walsh, J. L.	811
Bowen, N. A.		Evgrafov, M. A.	581	Kakehashi, T.	811, 812
Macintyre, A. J.	232	Fekete, M.	686	Gaier, D.	812
Lohin, I. F.	460, 461	Tumarkin, G. C.		Trošin, G. D.	812
Evgrafov, M. A.	461		686, 687	Evgrafov, M. A.	1011
Walsh, J. L.		Macintyre, S. S.	687	Evans, J. P.	
Davis, P.	580	Sakakihara, K.	687	Walsh, J. L.	1011
Mergelyan, S. N.		Davis, P.	717	*Evgrafov, M. A.	1104
Džrbašyan, M. M.					

**Quasi-analytic functions and monogenic functions.**

Malliavin, P.	18	Badalyan, G. V.	578	Pastides, N.	1091
Morgenstern, D.	342	Ellan, I. P.	690	Džrbašyan, M. M.	1091
Malliavin, P.	453	Lalagüé, P.	804		

## FUNCTIONS OF COMPLEX VARIABLES. (Continued)

## Several variables.

Hirzebruch, F.	26	Magnus, A.	463	Ozaki, S.	
Bremermann, H. J.	27	Stoll, W.	463	Kashiwagi, S.	
Hörmander, L.	27	Schwartz, L.	518	Tsuboi, T.	689, 690
Lelong, P.	123	Martinelli, E.	582	Ellanu, I. P.	690
Guggenheimer, H.	172	Hervé, M.	582	Hopf, H.	813
Norguet, F.	174	Thimm, W.	582	Stoll, W.	813
Fuka, B. A.	233	Washnitzer, G.	688	Schwartz, M.-H.	813
Séminaire		Egesoy, E.	688	Popovici, C.	813
H. Cartan.	233	Bingen, F.	688	Martinelli, E.	918
Cartan, H.	235	Berezin, F. A.		Bochner, S.	918
Serre, J.-P.	235	Fyatecki-		Bettermann, R.	1013
Hitotumatu, S.		Sapiro, I. I.	689	Koch, K.	1013
Kôta, O.	350	Kreyszig, E.	689	Hedtfeld, K.	1014
Bergman, S.	462	Stoll, W.	689	Arens, R. F.	
Rothstein, W.	462			Calderón, A. P.	1102

## Functions of quaternion variables. Cf. Calculus (contour integrals).

Nisigaki, H. 583

## Other generalizations.

Caccioppoli, R.	27	Yoneda, K.	351	Blum, E. K.	1033
Bilimovitch, A.	236	Tôki, Y.		Roşculeţ, M. N.	1099
Riley, J. D.	236	Shibata, K.	463	Rinehart, R. F.	1099
Douglas, A.	257	Miles, E. P.	471	Bers, L.	1114
Polak, A. I.	275	Fantappiè, L.	785	Vekua, I. N.	1114
Popov, B. S.	350	Del Pasqua, D.	785	Shimoda, I.	1123
Takasu, T.	350	Spampinato, N.	1014		

## FUNCTIONS OF REAL VARIABLES AND GENERALIZATIONS.

Cf. Calculus; completely monotone functions; convex functions; functional analysis; inequalities; measure and integration; probability (random functions).

*Natanson, I. P.	120	Nagy, B.	576	*Natanson, I. P.	804
*Szökefalvi-		*Richard, U.	577	*Frolov, N. A.	1005

## One real variable.

Četković, V.	19	Gehring, F. W.	346	Singer, I.	803
Goffman, C.	21	Popoviciu, T.	452	Delange, H.	806
Cargal, B.	21	Gonçalves, J. V.	453	Marcus, S.	806
Denjoy, A.	22	Agnew, R. P.	456	Haršiladze, F. I.	806
Krzyż, J.	27	Ulam, S. M.		Dell'Agnola, C. A.	910
Urbanik, K.	120	Hyers, D. H.	456	Grabiel, F.	910
Lammell, E.	120	Bledsoe, W. W.		Temple, G.	910
San Juan, R.	120	Norris, M. J.		Gehring, F. W.	910
Gonçalves, J. V.	120	Rose, G. F.	456	Loeffel, H.	911
Ostrowski, A.	124	Dubrovskii, V. M.	457	Anderson, T. W.	1005
Sikorski, R.	229	Darbo, G.	457	Obrechko, N.	1005
Sierpiński, W.	229	Gonçalves, V.	457	*Littlewood, J. E.	1005
Orlicz, W.	230	Coppel, W. A.	577	Popović, V.	1007
Ottaviani, G.	230	Sierpiński, W.	681	Delange, H.	1007
Heffter, L.	230	Smith, N. B.	682	Darbo, G.	1007
Bajraktarević, M.	341	Aquaro, G.	682	Maak, W.	1008
Popruženko, J.	343	Koksma, J. F.	682	Meyer, B.	1092
Sengupta, H. M.	344				

## Several real variables.

Behnert-		Sion, M.	344	Krickeberg, K.	807
Smirnov, K. N.	21	Kašanin, R.	346	Gagliardo, E.	911
Serghiesco, S.	118	Pezzana, M.	456	Ravetz, J. R.	911
Pini, B.	120	Kolesova, E. V.	457	Aruffo, G.	912
Vituškin, A. G.	121	Nicolescu, M.	576	Myška, A. D.	
Il'in, V. P.	121	Michael, J. H.	577	Bunt, A. Ya.	912
Kudryavcev, L. D.	121	Marcus, S.	806	Rodnyanskii, A. M.	912
Ostrowski, A.	342	Amanov, T. I.	806	Bielecki, A.	1005
Caászár, Á.	343	Nevanlinna, R.	806	Džvarševili, A. G.	1092

## Differentiation and tangents. Cf. Differential geometry (set-theoretical methods).

Shukla, U. K.	230	Kozakiewicz, W.	230	Marcus, S.	806
Butzer, P. L.		Pezana, M.	456	Roşculeţ, M. N.	1092

## Nondifferentiable functions and related topics.

Tomáš, M. 910

## Functions in abstract spaces.

Sierpiński, W. 230 Nagami, K. 1092

## GALOIS THEORY. See: algebra: abstract (Galois theory); algebra: equations (classical Galois theory).

## GAMES. Cf. Economics; probability.

Beale, E. M. L.	155	Fleming, W. H.	732	Blackwell, D.	843
Bellman, R.	155	Isaacs, R.	732	Zięba, A.	943
von Neumann, J.	178	Bellman, R.	732	Berge, C.	1046
Blackett, D. W.	273	Bernstein, C.	732	Miyasawa, K.	1134
de Jongh, B. H.	273	Lemke, C. E.	752	*Blackwell, D.	
Berge, C.	500	Ville, J. A.	838	Girshick, M. A.	1135
Thrall, R. M.		Bellman, R.		Karlin, S.	1135
Coombs, C. H.		Gross, O.	843	Mycielski, J.	
Davis, R. L.,		Gaddum, J. W.		Zięba, A.	1135
editors.	605	Hoffman, A. J.		Danskin, J. M.	1135
Berge, C.	717	Sokolowsky, D.	843	Bellman, R.	1135

## GAMMA FUNCTIONS. See: special functions (gamma function).

## GAS DYNAMICS. See: hydrodynamics (perfect fluids: compressible).

## GENETICS. See: biological problems; statistics (biometrics).

## GEODESY.

Elementary geodesy. Cf. Differential geometry (special mapping problems).

Krames, J. 293

## GEOELECTRICITY. See: geophysics (geoelectricity).

## GEOMAGNETISM. See: geophysics (geoelectricity).

## GEOMETRICAL OPTICS. See: optics (geometrical).

## GEOMETRY. Cf. Algebraic geometry; calculus (applications to geometry); contact transformations; continuous geometry; convex bodies; descriptive geometry; differential geometry; groups (group-theoretical problems of geometry); isoperimetric problems; topology; trigonometry; vector and tensor calculus.

*Baumgartner, L.	63	Aleksandrow,		Monographs on	
*Efimov, N. V.	395	A. D.	1044	modern	
Scorza Dragoni, G.	959	Berghuys, J. J. W.	1044	mathematics.	1143
Sawyer, W. W.	989	Libois, P.	1044		

## Foundations. Cf. Logic; philosophy.

Naumann, H.	64	Radice, L.	278	Klingenberg, W.	739
Sperner, E.	278	Kuiper, N. H.	393	Chisini, O.	1143
Lombardo-		Karzel, H.	395	Varga, O.	1144

## Elementary geometry. Cf. Topology (elementary).

Schub, F.	62	Marmion, A.	277	Barlotti, A.	848
Neville, E. H.	62	Lauffer, R.	277	Thébault, V.	848
Jeger, M.	62	Eves, H.	277	Jacob, M.	1044
Spezia, C.	161	Bottema, O.	393	Bilimović, A.	1044
Brejcha, J.	277	Bottema, O.	611	Lorent, H.	1044
Goormaghtigh, R.	277	Labra, M.	738	Goormaghtigh, R.	1044
Thébault, V.	277	Villa, M.	848	Morón, Z.	1046

## Triangles, tetrahedra, etc.

de Majo, A.	277	Rényi, A.	611	Popov, B. S.	949
Thébault, V.	277	Marmion, A.	611	Thébault, V.	949
Eves, H.	277	*Thébault, V.	737	Marmion, A.	949
Strel'cov, V. V.	278	Mahler, K.	738	Lorent, H.	1044
Thébault, V.	393	Cavallaro, V. G.	738	de Majo, A.	1044
Marmion, A.	393	Mandzyuk, A. I.	738	Saaty, T. L.	1044
Hadwiger, H.	396	Jarden, D.	738	Fiedler, M.	1045
Beatty, S.	611	Devidé, V.	738	Thébault, V.	1143
Cavallaro, V. G.	611	Gambier, M.-B.	848	Singal, M. K.	
Blanchard, R.	611	Lubin, C.	848	Bhatnagar, P. L.	1143
Goormaghtigh, R.	611				

## Geometry of the circle and sphere.

Monseau, M.	277	Sichardt, W.	506	Di Nol, S.	848
Deaux, R.	277	Garrett, M. W.	506	Szász, P.	1045
Bilinski, S.	276				

## Theory of constructions.

Yamashita, C.	62	Bottema, O.	949		
Lenz, H.	63	Locher-Ernst, L.	1143		

## Regular figures and divisions of space. Cf. Elliptic function (modular groups); groups (crystallography).

Pinoult, J. 393 Rabin, M. 393 Šubnikov, A. V. 848

GEOMETRY. (Continued)

Configurations.

Lauffer, R.	63	Zacharias, M.	506	Jaswon, M. A.	
Lauffer, R.	393	Sydlar, J.-P.	849	Dove, D. B.	1143
		Bydžovský, B.	949	Byušgens, S. S.	1143

Analytic geometry. Cf. Algebra: linear.

*Blaschke, W.	63	Ghosh, N. N.	612	Jackson, S. B.	
Lorent, H.	277	Neville, E. H.	849	Greenspan, D.	949
Toscano, L.	277	Hohenberg, F.	849	Coxeter, H.S.M.	949
Byušgens, S. S.	393	Kadefávek, F.	849	Nyström, E. J.	1045
Dias Agudo, F.R.	506	Wunderlich, W.	849	Fempi, S.	1045
Lomazzi, L.	506	Mašek, V.	949	Niče, V.	1045
				Meynleux, R.	1143

Projective geometry. Cf. Algebra: linear.

Skornyakov, L.A.	60	Klingenberg, W.	507	Lombardo-	
*Blaschke, W.	63	Zappa, G.	507	Radice, L.	950
Brauer, H.	63	Džavadov, M. A.	507	Klingenberg, W.	950
Primrose, E.J.F.	63	Lenz, H.	739	Locher-Ernst, L.	1045
André, J.	64	Ree, Rimbak.	739	Bruck, R. H.	1081
Leisenring, K. B.	64	André, J.	739	Byušgens, S. S.	1143
Naumann, H.	64	*Dequoy, N.	783	Kroch, A.	1143
Charneau, A.	161	Jónsson, B.	787	Tits, J.	1143
Lombardo-		Salzmann, H.	845	Castrucci, B.	1143
Radice, L.	278	Longo, C.	849	Coxeter, H. S. M.	1143
Jung, H. W. E.	278	Bureau, W.	852	Dempster, A. P.	
Charneau, A.	394	Godeaux, L.	949	Schuster, S.	1144
Lombardo-		Palman, D.	949	Court, N. A.	1144
Radice, L.	395	Pini, M.-Schuff, K.	949	Bilo, M. J.	1144
Hall, M., Jr.	395	Rios de Souza, J.		Pirko, Z.	1144
Lenz, H.	395		949, 950	van Heemert, A.	1145
Medek, V.	506				

Geometry in fields.

Leisenring, K. B.	64	Neumann, H.	739	Klingenberg, W.	950
*Zappa, G.	559	Poli, L.	849	Edge, W. L.	1046
Kustanheimo,		Rao, C. R.	893	Bilo, M. J.	1144
P.-Qvist, B.	612	Berman, G.	893		

Lines and higher space elements. Cf. Differential geometry (differential line geometry; Laguerre geometries; geometry of lineal elements).

Edge, W. L.	1046	Varga, O.	1144
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Non-Euclidean geometry.

Skopec, Z. A.	64	Kárteszi, F.	394	Jackson, S. B.	
Morduhai-		Spampinato, N.	397	Greenspan, D.	949
Boltovskoi, D.D.	161	Džavadov, M. A.	507	Hadamard, J.	1045
Antonescu, M.	161	De Donder, Th.	612	Neumann, M.	1045
Wright, J.	161	Bompiani, E.	612	Szász, P.	1045
Bottema, O.	278	Seidel, J.	738	D'Antona, G.	1045
Norden, A. P.	394	Hofmann, L.	738	Varga, O.	1144
Maier, W.	394	Blaschke, W.	853	Coxeter, H. S. M.	1145
				*Bonola, R.	1145

Minkowski geometry and other generalizations. Cf. Differential geometry (Finsler spaces).

Belgoder, P.	849
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Abstract metrics. Cf. Calculus of variations (generalized geometrical theory); differential geometry (Finsler spaces); functional analysis (general abstract spaces).

Wald, A.	64	Ganea, T.	507	van Heemert, A.	1145
Plis, A.	165	Blumenthal, L.M.	1139	Freudenthal, H.	1145

GEOMETRY OF NUMBERS. See: number theory (geometry of numbers).

GEOPHYSICS. Cf. Astronomy (figures of equilibrium).

Hydrology, oceanography.

Khare, R. C.	189	Ferrandon, J.	319	Fil'čakov, P. F.	875
Scheidegger, A.E.	190	Goldsbrough, G.R.	420	Corkan, R. H.	
Barenblatt, G. I.	298	Kolmogorov, A.N.	421	Doodson, A. T.	972
Polubarinova-		Carrier, G. F.		Polodil, G. N.	1062
Kočina, P. Ya.	298	Munk, W. H.	763	Barenblatt, G. I.	1171
Samanskii, V. E.	298	Segal, B. I.	820	Nužin, M. T.	1171

Meteorology.

Berkofsky, L.	79	Kao, Shih-Kung.	420	Thompson, P. D.	763
Van Mieghem, J.	87	Thrane, P.	642	Giraud, P.	
Platzman, G. W.	180	Ellassen, A.		Kiveliiovitch, M.	880
van Mieghem, J.	196	Heiland, E.		Bessemoulin, J.	880
Thompson, P. D.	300	Riis, E.	642	Shimose, T.	973
Davies, D. R.	305	Riis, E.	642	Kiveliiovitch, M.	1066
Payne, L. E.	420	Heiland, E.	642, 643	Skumanich, A.	1174

GEOPHYSICS. (Continued)

Seismology.

Satō, Y.	93	Satō, Y.	542	Massaglia, B.	976
Stoneley, R.	93	Pinney, E.	647, 648	Zav'yalov, V. D.	
Svekló, V. A.	422	Satō, Y.	648	Timoin, Yu. V.	1071
Matuzawa, T.		Kimura, T.	700	Newlands, M.	1071
Hasegawa, H.	542	Fogagnolo		Dasgupta, S. C.	1071
Matumoto, T.				Satō, Y.	1178

Potentials. Cf. Geodesy (higher).

Andreev, B. A.	1056	Kolbenheyer, T.	1109
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Geoelectricity, geomagnetism.

Törnqvist, G.	293	Glenn, O. E.	825
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GRADUATION. See: errors; numerical methods (differences); statistics (frequency functions).

GRAPHICAL METHODS. See: numerical methods.

GRAPHS. See: mechanics (statics); topology (graphs).

GRAVITATION. See: astronomy (cosmology); geodesy (higher) geophysics (potentials); potential theory; relativity.

GREEN'S FUNCTIONS. See: differential equations; harmonic functions (Dirichlet problem); heat conduction.

GROUPS. Cf. Algebra: abstract; algebra: linear; elliptic functions (modular groups); topology.

*Beaumont, R.A.		*Zappa, G.	328	*Smirnov, W. I.	663
Ball, R. W.	210	*Mostowski, A.		*Alexandrov, P.S.	791
*Dubreil, P.	328	Stark, M.	663		

Finite groups.

Azickil, S. P.	9	Itō, N.	332	Zappa, G.	793
Inaba, E.	110	Green, J. A.	565	Suprunenko, D.	793
Itō, N.	110	Higman, D. G.	565	Schenkman, E.	898
Wolf, P.	110	Keller, O.-H.	566	Helmberg, G.	899
Thierrin, G.	216	Kawada, Y.	670	Moser, L.	
Picard, S.	216	Frucht, R.	671	Wyman, M.	904
Neumann, B. H.		Schenkman, E.	671	Cobbe, A. P.	947
Neumann, H.	216	Gaschütz, W.	671	Huppert, B.	994
Nowacki, W.	331	Ado, I. D.	672	Pollak, G.	994
Wever, F.	331	Taunt, D. R.	792	Picard, S.	994
Wielandt, H.	331	Zitarosa, A.	792	Götlin, E.	994
Cunihin, S. A.	331	Fryer, K. D.	793	Grün, O.	994
Huppert, B.	332	Beaumont, R. A.		Bruck, R. H.	1081
Huppert, B.		Peterson, R.P.	793	*Burnside, W.	1086

Abstract groups in general.

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HAAR MEASURE. See: measure (integration in abstract spaces).

HANKEL TRANSFORMS. See: integral transforms (Mellin transforms).

HARMONIC ANALYSIS. See: Fourier integrals; Fourier series; groups (continuous groups); numerical methods (practical harmonic analysis); statistics (time series).

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HEAVISIDE CALCULUS. See: operational calculus.

HERMITE FORMS. See: algebra: linear (quadratic forms).

HERMITE POLYNOMIALS. See: interpolation; polynomials; special functions (hypergeometric functions).

HILBERT SPACES. See: differential geometry (Finsler spaces); functional analysis (Hilbert spaces); measure and integration; topology (topological spaces; applications).



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LAMÉ FUNCTIONS. See: special functions (Legendre functions).

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LINEAR ALGEBRA. See: algebra: abstract; algebra: linear

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Briggs, W. E.	222	Watson, G. L.	680	Descombes, R.	803
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OSCILLATION AND COMPARISON THEOREMS. See: differential equations (ordinary linear).

OSCILLATIONS. See: differential equations; elasticity (wave propagation); hydrodynamics (wave propagation); mechanics (oscillations); numerical methods (differential equations); practical harmonic analysis).

p-ADIC THEORY. See: algebra: abstract (p-adic theory); number theory.

PARABOLIC DIFFERENTIAL EQUATIONS. See: differential equations; diffusion; functional analysis (existence theorems); heat condition; numerical methods (differential equations).

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PARTITIONS. See: combinatorial analysis; number theory (elementary; additive; number-theoretical functions).

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PLATEAU PROBLEM. See: calculus of variations (minimal surfaces); differential geometry (minimal surfaces).

PLATES. See: elasticity (plates).

POINTS SETS. See: convex bodies; differential geometry (set-theoretical methods); functional analysis; functions of real variables (differentiation); measure and integration; potential theory (capacity constants); sets; topology.

POLITICAL ARITHMETIC. See: actuarial mathematics (mathematics of finance).

POLYHARMONIC FUNCTIONS. See: harmonic functions (biharmonic functions).

POLYHEDRA. See: geometry; topology.

POLYNOMIALS. Cf. Algebra: equations; Fourier series (trigonometric polynomials); interpolation.

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## PROJECTIVE GEOMETRY. See: geometry (projective).

## PROOFS, THEORY OF. See: logic (formal).

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RIEMANNIAN GEOMETRY. See: differential geometry.

RINGS. See: algebra: abstract (commutative rings; non-commutative rings); functional analysis (Hilbert spaces; normed rings); partially ordered sets (Boolean algebras).

ROTATING FLUID BODIES. See: astronomy (figures of equilibrium).

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SEISMOLOGY. See: geophysics (seismology).

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SEMI-GROUPS. See: groups (generalized groups); functional analysis.

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**SERIES.** Cf. Almost periodic functions; approximation; continued fractions; differences; Dirichlet series; Fourier series; functions of complex variables (polynomial expansions); interpolation; numerical methods (computation of series); polynomials (polynomial approximations); probability theory (random functions in analysis); Tauberian theorems.

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TORSION. See: elasticity (torsion).

TRANSCENDENCY PROBLEMS. See: Diophantine approximations (transcendence problems).

TRANSFINITE DIAMETER. See: polynomials (polynomial approximations); potential theory (capacity constants).

TRANSFINITE NUMBERS. See: sets (transfinite numbers).

TRIANGLES. See: geometry (triangles).

TRIGONOMETRIC INTERPOLATION. See: Fourier series (trigonometric interpolation).

TRIGONOMETRIC POLYNOMIALS AND SERIES. See: Fourier series.

TRIGONOMETRY. Cf. Geodesy.

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TURBULENCE. See: hydrodynamics (turbulence); statistical mechanics.

UNIFORMIZATION. See: functions of complex variables (Riemann surfaces).

UNIVALENT FUNCTIONS. See: functions of complex variables.

UNIVERSAL ALGEBRA. See: algebra: abstract (universal algebra).

VALUATIONS. See: algebra: abstract (valuations).

VARIATIONAL PRINCIPLES. See: calculus of variations; differential equations; integral equations; numerical methods (differential equations).

VARIATIONS, CALCULUS OF. See: calculus of variations.

VECTOR AND TENSOR CALCULUS. Cf. Differential geometry; geometry (projective).

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VIBRATIONS. See: differential equations; elasticity (wave propagation); electricity; hydrodynamics (wave propagation); mechanics (oscillations); numerical methods (differential equations); practical harmonic analysis).

VISCOUS FLUIDS. See: hydrodynamics (viscous fluids).



WARING PROBLEM. See: number theory (Waring problem).

WAVE MECHANICS. See: quantum mechanics.

WAVES. See: acoustics; differential equations; elasticity (wave propagation); electricity (waves); geophysics; hydrodynamics (wave propagation); numerical methods (differential equations).

WEBS, GEOMETRY OF. See: differential geometry (families of curves).

WHITTAKER FUNCTIONS. See: special functions (Bessel functions).

ZEROS. See: algebra: equations (zeros); functions of complex variables (zeros); numerical methods (equations); polynomials (zeros); special functions.

ZETA FUNCTIONS. See: Dirichlet series (zeta functions); number theory.

## ABBREVIATIONS OF NAMES OF JOURNALS: ADDENDA

This list supplements that given in volume 15, pp. 1128-1138. It gives the form of reference used in MATHEMATICAL REVIEWS and the complete title (when it differs from this form); the place of publication and other pertinent information are given in parentheses when desirable for clarity. Scripts other than Roman, Cyrillic and Greek are disregarded unless no title in one of these three appears.

- Acta Astr. Sinica.* Acta Astronomica Sinica. (Peking. Title also in Chinese.)
- Acta Hydrophys.* Deutsche Akademie der Wissenschaften zu Berlin. Institut für Physikalische Hydrographie. Acta Hydrophysica.
- Acta Math. Sinica.* Acta Mathematica Sinica. (Peking. Title also in Chinese. Formerly: *J. Chinese Math. Soc.*)
- Acta Univ. Debrecen.* Acta Universitatis Debreceniensis de Ludovico Kossuth Nominatae. (Budapest.)
- Akad. Nauk Azerbaidžan. SSR. Trudy Inst. Fiz. Mat.* Akademiya Nauk Azerbaidžanskoi SSR. Trudy Instituta Fiziki i Matematiki. (Baku. Title also in Azerbaijani.)
- Akad. Nauk Ukrain. RSR. Prikl. Meh.* Akademiya Nauk Ukrain'skoi RSR. Viddil Tehničnih Nauk. Prikladna Mehanika. (Kiev.)
- Akad. Nauk Uzbek. SSR. Trudy Inst. Mat. Meh.* Akademiya Nauk Uzbekskoi SSR. Trudy Instituta Matematiki i Mehaniki imeni V. I. Romanovskogo. (Tashkent. Title also in Uzbek.)
- Akust. Ž.* Akademiya Nauk SSSR. Akustičeskij Žurnal. (Moscow.)
- Azerbaidžan. Gos. Univ. Trudy. Ser. Fiz.-Mat.* Trudy Azerbaidžanskogo Gosudarstvennogo Universiteta im. S. M. Kirova. Seriya Fiziko-Matematičeskaya. (Baku.)
- Belorussk. Gos. Univ. Uč. Zap. Ser. Fiz.-Mat.* Belorusskij Gosudarstvennyj Universitet imeni V. I. Lenina. Učenyje Zapiski. Seriya Fiziko-Matematičeskaya. (Minsk.)
- Belorussk. Politehn. Inst. Sb. Nauč. Rabot.* Sbornik Naučnyh Rabot Belorusskogo Politehničeskogo Instituta. (Minsk.)
- Braunschweig. Wiss. Ges. Abh.* Abhandlungen der Braunschweigischen Wissenschaftlichen Gesellschaft. (Braunschweig.)
- Bull. Res. Council Israel. Sect. A.* Bulletin of the Research Council of Israel. Section A. Mathematics, Physics and Chemistry. (Jerusalem.)
- Com. Acad. R. P. Române.* Comunicările Academiei Republicii Populare Române. (Bucarest.)
- Dnepropetrovsk. Gos. Univ. Nauč. Zap.* Dnepropetrovskij Gosudarstvennyj Universitet. Naučnye Zapiski. (Dnepropetrovsk.)
- Dnepropetrovsk. Inst. Inžen. Želez.-Dorož. Transport. Trudy.* Trudy Dnepropetrovskogo Instituta Inženerov Železnodorožnogo Transporta. (Dnepropetrovsk.)
- Dohl. Akad. Nauk Azerbaidžan. SSR.* Doklady Akademii Nauk Azerbaidžanskoi SSR. (Baku. Title also in Azerbaijani.)
- Dohl. Akad. Nauk Uzbek. SSR.* Doklady Akademii Nauk Uzbekskoi SSR. Uzbekiston Fanlar Akademiyasining Dokladi. (Tashkent.)
- Eötvös L. Tud.-Egy. Kiadv. Term.-Tud. Kar Évh.* Az Eötvös Loránd Tudományegyetem Kiadványa. A Természettudományi Kar Évkönyve. (Budapest.)
- Inst. Mašinoved. Avtomat. Nauč. Zap.* Institut Mašinovedeniya i Avtomatiki. Akademii Nauk Ukrainskoi SSR. Naučnye Zapiski. (Kiev.)
- Irkutsk. Gos. Univ. Trudy.* Trudy Irkutskogo Gosudarstvennogo Universiteta im. A. A. Ždanova. (Irkutsk.)
- Ivanov. Gos. Ped. Inst. Uč. Zap. Fiz.-Mat. Nauki.* Ivanovskij Gosudarstvennyj Pedagogičeskij Institut. Učenyje Zapiski. Fiziko-Matematičeskije Nauki. (Ivanovo.)
- Izv. Akad. Nauk Belorussk. SSR.* Izvestiya Akademii Nauk Belorusskoi SSR. (Minsk.)
- J. Asiatic Soc.* Journal of the Asiatic Society. (Calcutta. Formerly: *J. Roy. Asiatic Soc. Bengal. Sci.*)
- J. Assoc. Appl. Phys. Calcutta Univ.* Journal of Association of Applied Physicists Calcutta University.
- J. Chinese Math. Soc.* Journal of the Chinese Mathematical Society. (Peking. Title also in Chinese. Superseded by Acta Mathematica Sinica with volume 3, no. 1.)
- J. Electronics.* Journal of Electronics. (London.)
- Jap. J. Geophys.* Science Council of Japan. Japanese Journal of Geophysics. (Tokyo.)
- Jap. Sci. Rev. Mech. and Electr. Eng.* Japan Science Review. Mechanical and Electrical Engineering. (Tokyo.)
- Kazan. Aviac. Inst. Trudy.* Trudy Kazanskogo Aviacionnogo Instituta. (Kazan.)
- Kazan. Gos. Univ. Uč. Zap.* Učenyje Zapiski Kazanskogo Gosudarstvennogo Universiteta imeni V. I. Ul'yanova-Lenina. (Kazan.)
- Kazan. Inst. Inžen.-Stroit. Neft. Promyš. Nauč. Trudy.* Naučnye Trudy Kazanskogo Instituta Inženerov-Stroitelei Neftyanol Promyšlennosti. (Kazan.)
- Kiev. Avtomob.-Dorož. Inst. Trudy.* Trudy Kievskogo Avtomobil'nogo-Dorožnogo Instituta. (Kiev.)
- Kiiv. Derž. Ped. Inst. Nauč. Zap. Fiz.-Mat. Ser.* Kiiv's'kij Deržavnij Pedagogičnij Institut im. O. M. Gor'kogo. Naukovi Zapiski. Fiziko-Matematična Seriya. (Kiev.)
- Kiiv. Derž. Univ. Nauč. Zap.* Kiiv's'kij Deržavnij Universitet im. T. G. Ševčenko. Naukovi Zapiski. (Kiev.)
- Kirgis. Gos. Univ. Trudy Fiz.-Mat. Fak.* Trudy Fiziko-Matematičeskogo Fakulteta Kirgizskogo Gosudarstvennogo Universiteta. (Frunze.)
- Kirov. Gos. Ped. Inst. Uč. Zap.* Kirovskij Gosudarstvennyj Pedagogičeskij Institut im. V. I. Lenina. Učenyje Zapiski. (Kirov.)
- Kišinev. Gos. Univ. Uč. Zap.* Kišinevskij Gosudarstvennyj Universitet. Učenyje Zapiski. (Kišinev.)
- Kuibyshev. Indust. Inst. Sb. Nauč. Trudov.* Sbornik Naučnyh Trudov Kuibyshevskogo Industrial'nogo Instituta. (Kuibyshev.)
- Las Ciencias. Madrid.* Las Ciencias. (Madrid.)
- Leningrad. Elektrotehn. Inst. Izv.* Izvestiya Leningradskogo Elektrotehničeskogo Instituta. (Leningrad.)
- Leningrad. Gos. Ped. Inst. Uč. Zap.* Leningradskij Gosudarstvennyj Pedagogičeskij Institut im. A. I. Gercena. Učenyje Zapiski. (Leningrad.)
- Leningrad. Inst. Inžen. Vod. Transp. Trudy.* Trudy Leningradskogo Instituta Inženerov Vodnogo Transporta. (Leningrad.)
- Leningrad. Inžen.-Ekonom. Inst. Trudy.* Trudy Leningradskogo Inženerno-Ekonomičeskogo Instituta. (Leningrad.)
- Leningrad. Inžen.-Stroit. Inst. Sb. Nauč. Trudov.* Leningradskij Ordena Trudovogo Krasnogo Znameni Inženerno-Stroitel'nyj Institut. Sbornik Naučnyh Trudov. (Leningrad.)
- L'viv. Derž. Univ. Dopovidi ta Povidomlennya.* L'viv's'kij Deržavnij Universitet imeni Ivana Franka. Dopovidi ta Povidomlennya. (Lwów.)
- L'vov. Gos. Univ. Uč. Zap. Ser. Meh.-Mat.* L'vovskij Gosudarstvennyj Universitet imeni Ivana Franko. Učenyje Zapiski. Seriya Mehaniko-Matematičeskaya. L'viv's'kij Deržavnij Universitet imeni Ivana Franka. Naukovi Zapiski. Seriya Mehaniko-Matematična. (Lwów. Title of series varies.)
- L'vov. Politehn. Inst. Nauč. Zap. Ser. Fiz.-Mat.* L'vovskij Politehničeskij Institut. Naučnye Zapiski. Seriya Fiziko-Matematičeskaya. (Lwów.)
- Management Sci.* Management Science. Official Journal of the Institute of Management Science. (Philadelphia.)
- Mem. Fac. Ed. Kumamoto Univ.* Memoirs of the Faculty of Education Kumamoto University.
- Mem. Ist. Lombardo. Cl. Sci. Mat. Nat.* Memorie del R. Istituto Lombardo di Scienze e Lettere. Classe di Scienze Matematiche e Naturali.
- Mikolaiv. Derž. Ped. Inst. Nauč. Zap.* Naukovi Zapiski Mikolaiv's'kogo Deržavnogo Pedagogičeskogo Instituta. (Mikolaiv.)
- Molotov. Gos. Univ. Uč. Zap.* Učenyje Zapiski Molotovskogo Gosudarstvennogo Universiteta im. A. M. Gor'kogo. (Molotov.)
- Moskov. Gos. Ped. Inst. Uč. Zap.* Učenyje Zapiski Moskovskogo Gosudarstvennogo Pedagogičeskogo Instituta imeni V. I. Lenina. (Moscow.)
- Moskov. Oblast. Pedagog. Inst. Uč. Zap.* Trudy Kafedr Mat. Moskovskij Oblastnoi Pedagogičeskij Institut. Učenyje Zapiski. Trudy Kafedr Matematiki. (Moscow.)
- Naslava Mat. Fiz.* Savez Društava Matematičara i Fizičara FNRJ. Nastava Matematike i Fiziike. L'Enseignement Mathématique et Physique. (Beograd.)
- Novočerkassk. Politehn. Inst. Trudy.* Trudy Novočerkasskogo Politehničeskogo Instituta. (Novočerkassk.)
- Oceanogr. Mag.* The Oceanographical Magazine. (Tokyo.)
- Pakistan J. Sci. Res.* Pakistan Journal of Scientific Research. (Lahore. Formerly published as part of the Pakistan Journal of Science.)
- Prace Mat.* Roczniki Polskiego Towarzystwa Matematycznego. Seria I. Prace Matematyczne. (Warsaw.)
- Proc. Nat. Inst. Sci. India. Part A.* Proceedings of the National Institute of Sciences of India. Part A. Physical Sciences. (Delphi.)
- Publ. Sci. Univ. Alger. Sér. A.* Publications Scientifiques de l'Université d'Alger. Série A. Sciences Mathématiques.

- Rev. Ci. Apl.* Revista de Ciencia Aplicada. (Madrid.)  
*Rev. Mat. Cuyana.* Universidad Nacional de Cuyo. Departamento de Investigaciones Científicas. Revista Matemática Cuyana. (Mendoza.)  
*Rev. Math. Phys.* Académie de la République Populaire Roumaine. Revue de Mathématiques et de Physique. (Bucarest.)  
*Rev. Univ. "C. I. Parhon"* Politehn. București. Ser. Ști. Nat. Revista Universității "C. I. Parhon" și a Politehnicii București. Seria Științelor Naturii.  
*Rostov. Gos. Ped. Inst. Uč. Zap.* Rostovskii-na-Donu Gosudarstvennyi Pedagogičeskii Institut. Učeny Zapiski. (Rostov on Don.)  
*Rostov. Gos. Univ. Sb. Stud. Nauč. Rabot.* Sbornik Studentičeskikh Naučnyh Rabot Rostovskogo-na-Donu Gosudarstvennogo Universiteta. (Rostov on Don.)  
*Rostov. Gos. Univ. Uč. Zap. Fiz.-Mat. Fak.* Rostovskii-na-Donu Gosudarstvennyi Universitet imeni V. M. Molotova. Učeny Zapiski Fiziko-Matematičeskogo Fakulteta. (Rostov on Don.)  
*Science R. P. Roumaine.* Académie de la République Populaire Roumaine. La Science dans la République Populaire Roumaine. (Bucarest.)  
*Sci. Rep. Kanazawa Univ.* The Science Reports of the Kanazawa University. (Kanazawa.)  
*Soc. Parana. Mat. Anuário.* Sociedade Paranaense de Matemática. Anuário. (Curitiba.)  
*Stalingrad. Gos. Ped. Inst. Uč. Zap.* Učeny Zapiski Stalingradskogo Gosudarstvennogo Pedagogičeskogo Instituta im. A. S. Serafimoviča. (Stalingrad.)  
*Statistica Neerlandica.* Statistica Neerlandica. ('s-Gravenhage.)  
*Stavropol. Gos. Ped. Inst. Sb. Nauč. Trudov.* Sbornik Naučnyh Trudov Stavropol'skogo Gosudarstvennogo Pedagogičeskogo Instituta. (Stavropol.)  
*Studia Logica.* Polska Akademia Nauk. Komitet Filozoficzny. Studia Logica. (Warsaw.)  
*Studia Soc. Sci. Torunensis. Sect. A.* Studia Societatis Scientiarum Torunensis. Sectio A. (Mathematica-Physica). (Torun.)  
*Svenska Aeroplan A. B. Tech. Note.* SAAB Aircraft Company. Svenska Aeroplan Aktiebolaget. Technical Notes. (Linköping, Sweden.)  
*Tallin. Politehn. Inst. Trudy. Ser. A.* Tallinna Politehnilise Instituudi Toimetised. Trudy Tallinskogo Politehničeskogo Instituta. Seriya A. (Tallin.)  
*Tartu. Gos. Univ. Trudy Estest.-Mat. Fak.* Tartu Riikliku Ülikooli Toimetised. Učeny Zapiski Tartuskogo Gosudarstvennogo Universiteta. Matematika-Loodusteaduskonna Töid. Trudy Estestvenno-Matematičeskogo Fakulteta. (Tallin.)  
*Technion. Israel Inst. Tech. Sci. Publ.* Technion. Israel Institute of Technology. Scientific Publications. (Haifa.)  
*Theoria. Theoria.* Revista de Teoria, Historia y Fundamentos de la Ciencia. (Madrid.)  
*Tokyo Kyoiku Daigaku. Sāgaku Kenkyū Roku.* Tokyo Kyoiku Daigaku. Sāgaku Kenkyū Roku. (Tokyo.)  
*Trudy Central. Nauč.-Issled. Inst. Geodes., Aëros"emki Kartogr.* Trudy Central'nogo Naučno-Issledovatel'skogo Instituta Geodezii, Aëros"emki i Kartografii. (Moscow.)  
*Trudy Inst. Istor. Estest. Tehn.* Akademiya Nauk SSSR. Trudy Instituta Istorii Estestvoznaniya i Tehniki. (Moscow. Formerly: Trudy Inst. Istorii Estest. and Trudy Istor. Tehn.)  
*Tul'sk. Meh. Inst. Trudy.* Trudy Tul'skogo Mehaničeskogo Instituta. (Tula.)  
*Tydschr. Wetensk. Kuns (N.R.)* Tydskrif vir Wetenskap en Kuns. Orgaan van die Suid-Afrikaanse Akademie vir Wetenskap en Kuns. Nuwe Reeks. (Pretoria.)  
*Ural. Politehn. Inst. Trudy.* Trudy Ural'skogo Politehničeskogo Instituta imeni S. M. Kirova. (Sverdlovsk.)  
*Uzbek. Gos. Univ. Trudy.* Ališer Navoi nom. Ūzbek Davlat Universiteti Asarlari. Trudy Uzbekskogo Gosudarstvennogo Universiteta im. Ališera Navoi. (Samarkand.)  
*Vestnik Akad. Nauk Kazah. SSR.* Vestnik Akademii Nauk Kazahskoi SSR. (Alma Ata.)  
*Vologod. Ped. Inst. Uč. Zap.* Učeny Zapiski Vologodskogo Pedagogičeskogo Instituta imeni V. M. Molotova. (Vologda.)  
*Voronež. Gos. Univ. Trudy. Fiz.-Mat. Sb.* Trudy Voronežskogo Gosudarstvennogo Universiteta. Fiziko-Matematičeskii Sbornik. (Subtitle varies.)  
*Wiadom. Mat. Roczniki Polskiego Towarzystwa Matematycznego. Seria II.* Wiadomości Matematyczne. (Warsaw.)  
*Wiss. Z. Friedrich-Schiller-Univ. Jena.* Wissenschaftliche Zeitschrift der Friedrich-Schiller-Universität Jena.  
*Wiss. Z. Pädagog. Hochsch. Potsdam. Math.-Nat. Reihe.* Wissenschaftliche Zeitschrift der Pädagogischen Hochschule Potsdam. Mathematisch-Naturwissenschaftliche Reihe.  
*Z. Math. Logik Grundlagen Math.* Zeitschrift für Mathematische Logik und Grundlagen der Mathematik. (Berlin.)  
*Z. Vermessungswesen.* Zeitschrift für Vermessungswesen. (Stuttgart.)

## ERRATA AND ADDENDA

## VOLUME 1

- ✓ P. 75: Hardy.  
In line 2 of the review read  $2(y^2-1)$  for  $2(y^2-1)$ .

## VOLUME 9

- ✓ P. 436: Plato.  
In the heading read "Plato, G." for "Plato".

## VOLUME 10

- ✓ P. 22: Boggio.  
In the right side of the displayed formula read  $f(x_0)$  for  $f(x_1)$ .

## VOLUME 12

- ✓ P. 818: Tôyama (third paper).  
In the title read "1950, no. 4" for "4".  
✓ P. 933: Lyapin.  
The entry for Lyapin is out of alphabetical order. It should occur between Luzin and Lyapunov, A. A.

## VOLUME 13

- ✓ P. 249: Chandrasekhar and Münch.  
In the title read "Astrophys." for "Astr."

## VOLUME 14

- ✓ P. 239: Pickert.  
Delete the last sentence of the review, which gives the false impression that the reviewer has a simpler proof. *G. Whaples.*  
✓ P. 670: Séminaire, 1950-51.  
On p. 671, 1st column, lines 39 and 40, read "in supposing that every member of  $\Phi$  has a closed neighbourhood belonging to  $\Phi$ " for "in supposing that all closed neighborhoods of members of  $\Phi$  belong to  $\Phi$ ".  
✓ P. 1089: Cinquini and Cinquini.  
In line 3 of the review read "space" for "sphere".  
✓ P. 1089: Nirenberg.  
In the displayed formula read  
$$\sum_{\alpha, \beta=1}^m b_{\alpha\beta} u_{\alpha} u_{\beta} \text{ for } \sum_{\alpha, \beta=1}^m b_{\alpha\beta} u_{\alpha} u_{\beta}.$$
  
✓ P. 1174: right column.  
The paper by Fourès-Bruhat was reviewed on p. 756.

## VOLUME 15

- ✓ P. 196: Tsuboi (both papers).  
In the title read "1" for "2".  
✓ P. 244: Adem.  
In the title read "10, nos. 1-2" for "10".  
✓ P. 277: Quine.  
In the title read "10, nos. 1-2" for "10".  
✓ P. 286: Zacher.  
In line 2 from the end insert "15, 775;" after "these Rev."  
✓ P. 334: Morales Martinez.  
In the title read "10, nos. 1-2" for "10".  
✓ P. 347: Chern.  
In the title read "10, nos. 1-2" for "10".  
✓ P. 385: Church.  
In the title read "10, nos. 1-2" for "10".  
✓ P. 386: Feys.  
In the title read "10, nos. 1-2" for "10".

- ✓ P. 402: Gel'fond.  
In the title read "8, no. 2" for "8".  
✓ P. 456: Valle Flores.  
In the title read "10, nos. 1-2" for "10".  
✓ P. 461: Szász.  
The title should read: Various elementary presentations of hyperbolic trigonometry.  
✓ P. 482: Trenin.  
In the title read "8, no. 2" for "8".  
✓ P. 557: Busemann.  
In the title read "10, nos. 1-2" for "10".  
✓ P. 570: Popov.  
In the title read "8, no. 2" for "8".  
✓ P. 591: Boyer.  
In the title read "97-108, 230-238" for "230-238".  
✓ P. 653: Sretenskiĭ.  
In the title read "8, no. 2" for "8".  
✓ P. 841: Reissner.  
In my review I expressed lack of confidence in one of the author's results. He has since convinced me that it is extremely unlikely that his result could be shown not to be a good approximation in the situations to which it is intended to apply. *J. L. Ericksen.*  
✓ P. 879: Grothendieck.  
In line 21 of the review the formula should read:  
 $u: E \otimes F \rightarrow E \otimes F.$   
✓ P. 914: Heisenberg.  
In the title read "1953" for "153".  
✓ P. 932: Laptin.  
The author's name should be Leptin.  
✓ P. 935: Lekkerkerker.  
The results of this paper are not new; they were obtained by R. D. Carmichael [Ann. of Math. (2) 15 (1913), 30-70]. The paper by Bang mentioned in the review appeared in Tidsskr. Math. (5) 4 (1886), 130-137. *W. J. LeVeque.*  
✓ P. 981: Radziszewski.  
In line 5 of the review read  $V$  for  $A$ ; in line 7 read  $aV/9$  for  $aA/9$ .  
✓ P. 1046: left column.  
The papers attributed to "Huber, A." should be listed as follows:  
Huber, Albert. Theorem of Phragmén-Lindelöf type 877  
Theorem of Ostrowski 944  
Huber, Anton. Randwertaufgabe der Geoelektrik 585  
✓ P. 1139: left column.  
The paper by Gut was reviewed on p. 243, not 43, of vol. 12.  
✓ P. 1139: right column.  
In the erratum for p. 239: Scheffé, the formula should read:  $\hat{\theta} - S\sigma\hat{\theta}$ .

## VOLUME 16

- ✓ P. 49: Gårding and Wightman (both papers).  
These reviews may be misleading in that the authors discuss and give examples bearing on the question of the classification of the multipliers, thereby revealing complications which may indicate that the problem has no simple general solution. *I. E. Segal.*  
✓ P. 51: Emerson.  
In lines 3 and 4 from the end of the review replace "in



an unpublished paper" by "Ann. of Math. (2) 60, 578-594 (1954); MR 16, 732".

P. 68: **Finikov**. (first paper).

✓ In the title read "8, no. 6" for "1953".

P. 114: **Forman and Shapiro**.

In the first displayed formula read: " $O(x^0)$ ;" for " $O(x^0)^n$ ,"; " $0 \leq \theta < 1$ " for " $0 \leq \theta > 1$ "; " $\sum_H c_H > 0$ " for

✓ " $\sum_H c_H < 0$ ".

P. 260: **Paasche**.

In line 2 from the bottom of p. 260 read  $a_m$  for  $a_n$ . In line 13, p. 261, read  $b_{nm}$  for  $a_{nm}$ . In line 16, p. 261, read  $f(z)$  for  $f(x)$ .

P. 267: **Fine**.

In line 2 of the review the formula should read:  $n^{-1} \sum_{k=0}^{n-1} ((2^k - \beta))$ . The first displayed formula should read:

$$\sigma^2 = \sum_{n=1}^{\infty} 2^{-n} ((\beta + [2^n \beta] - 2^n \beta))^2.$$

The second displayed formula should read:

$$\tau^2 = \beta - \beta^2 + 2 \sum_{n=1}^{\infty} 2^{-n} \{\min(\beta, \beta_n) - \beta \beta_n\}.$$

✓ P. 289: **Zbornik**.

✓ In the next to the last line read  $x > 20$  for  $x > 0$ .

P. 293: **Merran**

✓ In line 12 from the end read  $P_1$  for  $P_0$ .

P. 315: **Gelfand and Minlos**.

✓ In line 2 of the review read 212 for 219.

P. 316: **Landau, Abrikosov, and Halatnikov** (1st paper).

✓ In the title read "773" for "733".

P. 322: **van Kampen**.

✓ In line 8 of the review read "coarse" for "course".

P. 339: **Hasse**.

On p. 340, line 20, the left side of the equation should read:  $\prod \tau_K(\chi \psi) / \tau_K(\chi)$ . In line 23 the equation should read:  $\tau_K(\chi) = \sum \chi(x) e_K(x)$ .

P. 395: **Karzel**.

In line 5 of the review read "reflections" for "reflection".

P. 401: **Blanusa**.

Replace the first two sentences of the last paragraph of the review by: The second paper deals with the same problem but now for imbeddings of  $E_{l_m}$  in  $S_{M-1}$  ( $M = m(m+3)/2$ ), in  $R_{M-1}$  as a limiting case, and in  $H_{M-1}$  for  $m$  even. For the imbeddings in  $S_{M-1}$  for  $m$  even there is the restriction  $\varrho > r[m/(2m+2)]^{\frac{1}{2}}$ ; and for imbedding in  $H_{M-1}$  with  $m$  even there is no restriction. For  $m$  odd no imbedding is given for  $H_{M-1}$ , and for  $S_{M-1}$  the restriction is  $\varrho = r[m/(2m+2)]$ .

A. Nijenhuis.

P. 410: **Baranov**.

In the first sentence of the last paragraph of the review delete the words "are discussed".

P. 425: **Green**.

The reviewer's statement that elementary beam-theory limit analysis furnishes slightly lower upper bounds than those obtained by the author was incorrect, since the deforming region for the simple hinge must be entirely inside the beam and not extend into the rigid end support. The author is thus entitled to his belief that it is unlikely that the yield-point loads are over-estimated by his solutions. P. G. Hodge, Jr.

P. 450: **Linnik and Malyshev**.

The following sentence should be inserted at the bottom of p. 450 after "footing": Unfortunately, an error in Linnik's work which was pointed out by G. Pall

[MR 2, 348; Amer. J. Math. 64, 503-513 (1942); MR 4, 34] is perpetuated in the present paper; the correction straightens out the difficulty.

✓ P. 454: **Cerrillo**.

In the displayed formula delete the second =.

P. 463: **Tôki and Shibata**.

In line 10 of the review read "Bloch" for "Block".

✓ P. 465: **Rajagopal**.

The author has pointed out to the reviewer that in Theorem V, although he (the author) replaced a factor  $W(y)/(\theta(y))^{a-\alpha}$  occurring in Theorem IV by 1, it is not necessary (nor was it his intention) to take  $\theta = W^{1/(a-\alpha)}$  throughout the statement of Theorem V. Therefore the reviewer's criticism is not applicable. A similar remark applies to the reviewer's criticism of Theorem VII (misprinted as VIII).

In the second displayed formula of the review  $O$  should be  $O_R$ . L. S. Bosanquet.

✓ P. 511: **Segre**.

In the displayed formula read  $(-1)$  for  $(1)$ .

✓ P. 530: **Bogorodskii**.

In the first line of the review read "first-order" for "fine-order".

✓ P. 533: **Savin**.

✓ In line 5 of the review read " $T_0 = \zeta Q$ " for " $T_0 = \zeta_0$ ".

✓ P. 592: **Ezra**.

In line 4 of the review read " $P \neq Q$ " instead of " $P = Q$ ".

✓ P. 717: **Kendall**.

The displayed formula should read:

$$\lim_{n \rightarrow \infty} \| \{ (1-t)I + tT(1/n) \}^n x - T(t)x \| = 0.$$

✓ P. 741: **Gröbner**.

In line 10 from the bottom of the left-hand column of p. 742 replace the last part of the sentence, starting with "in every case", by "in every case in which the ideal (6)  $K[x]$  ( $\varphi_0, \dots, \varphi_m$ ) is not irrelevant there corresponds to it by (2) an irrelevant ideal of  $K[y]$ , whilst in the complete definition there always corresponds to (6) an ideal which is not irrelevant."

✓ P. 775: **Lampariello**.

The characteristics given by the author are of the first order, and not, as stated in the review, of the second order. The reviewer withdraws his criticism and apologizes to the author for an unjustifiable misreading.

J. L. Synge.

✓ P. 896: **San Soucie**.

The displayed formula on p. 897 should read:

$$(wx, y, z) = w(x, y, z) + (w, y, z)x + (w, x, y)z.$$

✓ P. 942: **Das**.

To the next to the last sentence of the review add " $\varphi$ , where  $\varphi = \min(\varphi_1, \varphi_2)$ ".

✓ P. 950: **Rios de Souza**.

In the first part of the reference replace "no. 2, 3-15" by "65-77".

✓ P. 1104: **Mergelyan**.

Delete the last sentence of the review.

✓ P. 1109: **Babuška**.

In line 3 of the review read  $\bar{x}\varphi(z)$  for  $x\varphi(z)$ .

✓ P. 1116: **Hong**.

I have learned that Hong's result was proved by Edgar Krahn at the end of his dissertation [Acta Comment. Univ. Tartuensis. Ser. A. 9 (1926), no. 1].

G. E. Forsythe.

✓ P. 1139: **Hayashi**.

In line 9 of the review read " $\dim R \leq 0$ " for " $\dim R \cup 0$ ".

The transliteration of Russian frequently causes confusion because of the variety of systems in use. The table below presents several systems presently used by libraries or by abstracting journals, including Mathematical Reviews, which are likely to be consulted by mathematicians. The system adopted by Mathematical Reviews has been in use since the beginning of volume 7. Other Slavic languages using a Cyrillic alphabet are transliterated by some modification of the Russian transliteration; Serbian is transliterated according to a standard procedure into the equivalent Croatian. If the author's name already appears transliterated in the paper, this transliteration is used by Mathematical Reviews.

Russian Letter Cap. Ital.	Mathematical Reviews	Zentralblatt für Mathematik	Bulletin Analytique	Applied Mechanics Reviews	Science Abstracts	U. S. Library of Congress	Amer. Slavic & E. European Review
А а	a	a	a	a	a	a	a
Б б	b	b	b	b	b	b	b
В в	v	v	v	v	v	v	v
Г г	g	g	g	g	g	g	g
Д д	d	d	d	d	d	d	d
Е е	e	e	e	e	e	e	e
Ё ё	ë	e	ë	ë	e	ë	ë
Ж ж	zh	z	zh	zh	zh	zh	z
З з	z	z	z	z	z	z	z
И и	i	i	i	i	i	i	i
Й й	j	j	j	j	j	j	j
К к	k	k	k	k	k	k	k
Л л	l	l	l	l	l	l	l
М м	m	m	m	m	m	m	m
Н н	n	n	n	n	n	n	n
О о	o	o	o	o	o	o	o
П п	p	p	p	p	p	p	p
Р р	r	r	r	r	r	r	r
С с	s	s	s	s	s	s	s
Т т	t	t	t	t	t	t	t
У у	u	u	u	u	u	u	u
Ф ф	f	f	f	f	f	f	f
Х х	h	ch	kh	kh	kh	kh	kh
Ц ц	c	c	c	ts	ts	ts	c
Ч ч	ch	ch	ch	ch	ch	ch	ch
Ш ш	sh	sh	sh	sh	sh	sh	sh
Щ щ	sch	sch	shch	shch	shch	shch	sch
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